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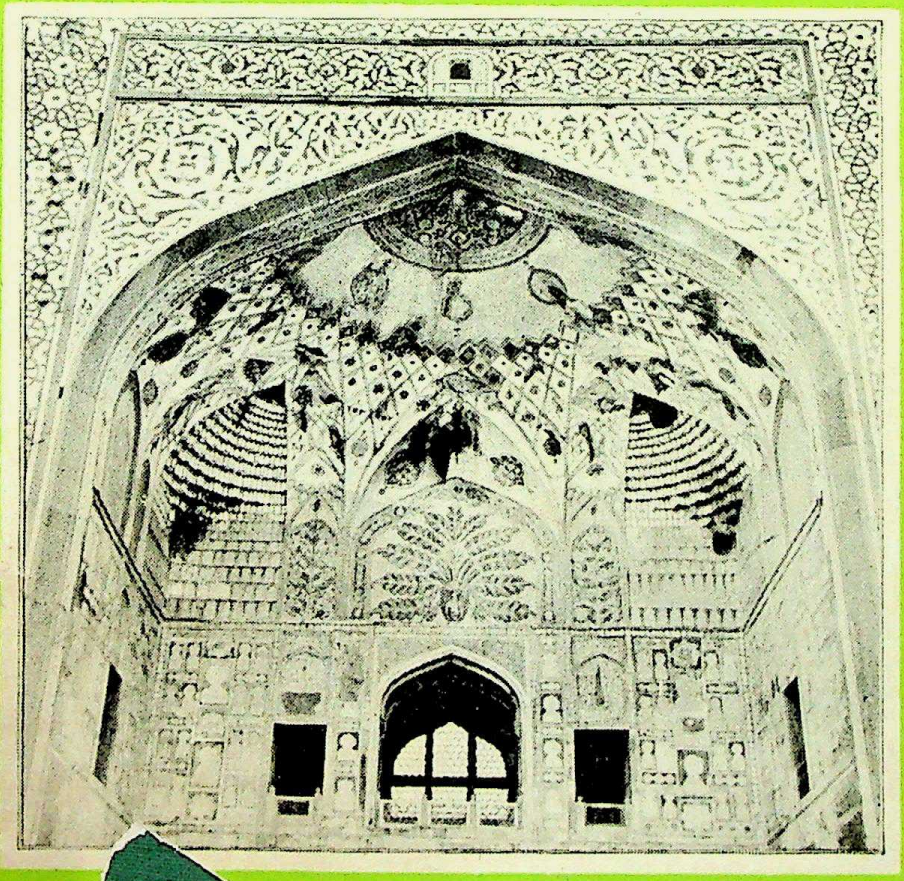
HISTORY OF DECORATIVE ART IN MUGHAL ARCHITECTURE

R. NATH



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R. NATH

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TO
PROFESSOR NIHARRANJAN RAY
DEDICATED
WITH PROFOUND RESPECT

Gilī khūsh-būy dar ḥammām rūzi
Rasīd as dast-i maḥbūbī bi-dastam
Bidū guftam ki mushkī ya 'abīrī
ki as būy i dil-āvīz-i tu mastam
Bi-guftā man gilī nā-chīz būdam
va līkin muddatī bā gul nishastam
Kamāl-i ham-nashīṇ dar man aṣar kard
va gar na man hamān khākam ki hastam.

—Sheikh Sa'di

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PREFACE

THE present work is a part, indeed the major part, of my D. Litt. thesis of the same title and is, in essence, an intensive study of the origin and development of the ornament in Mughal Architecture. It is the 'beautiful' which is most distinctive characteristic and the dominating theme of this style and it is this which primarily occupied contemplation of the Mughal builder. He was more interested in producing a monument which would be 'kamāl' (miraculous), 'lateef' (beautiful), 'nāyāb' (unrivalled, unique) and 'ajeebō-gharīb' (wonderful) than merely a tomb or a mosque. This 'beautiful' has not appeared in the monuments of the Mughals unconsciously, so to say, as a matter of chance or co-incidence; this has been brought about with the greatest amount of thought, planning and calculation through various means and methods and investigation of this ornament constitutes most important and most useful study of this style. The Mughal architect from Akbar to Shah Jehan worked out the minutest details of the structure and the surface which he intended to adorn, with utmost precision with regard to the environmental cues, ground-plan, admixture of parts, proportions etc., with a view to produce a beautiful memorial over and above its functional *raisond'etre*. He adopted almost all the decorative schemes, designs and motifs which were then known in the Orient, with a judicious sense of using them. That he used arch and dome, and also pillar, strut, chhatri and kalaśa; inscriptions in Naskhi and Nastaliq characters, arabesque, stalactite and geometricals and also animate designs composed of hastin, makara, haṃsa and mayūra, and symbolic motifs of the ancient Hindus such as kalaśa, padma, gavākṣa kīrtimukha, svastika, cakra and ṣaṭkoṇa — to quote some examples of his choice of ornament — is representative of his lucid skill and amazing capacity to accept, adopt and assimilate.

I have attempted to assess the foreign inspirations which contributed to the formation of the decorative art in Mughal Architecture on the one hand, and to study the indigenous element which sometimes played the decisive role, on the other. How the ornament evolved in the hands of the ingenious Mughal

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artisan, who was free from the dictates of the Canon Law as much as from the Sastric injunctions, is as interesting a study as it is enlightening. It explains scores of obscure and controversial points and corrects the popular misnomers; it brings to light facts which were not known, e.g. the use by the Mughals of fabulous animals, Tantric symbol and Chinese cloud-forms, to quote only a few examples. Study of this aspect of Mughal Architecture would, I trust, help us to present the History of our Medieval culture in its true spirit and correct perspective.

It must, however, be inscribed that in whatever exhaustive degree I have attempted to study each of these aspects, this is not the last word on the subject. Study of History is a continuous growth, an accretion and an unending process to which fresh facts and figures continuously add and, I must confess, my contribution to this vast literature is a modest instalment. In fact, in such a discipline as History it is not possible in one's life-time or even in an age, to deduce conclusions which would stand unaltered and unmodified, in perpetuity.

I thank Mr S. M. Tripathi (Librarian, Central Library, Agra College), Mr D. K. Samuel Raj (Librarian, St. John's College, Agra) and Mr P. D. Jhamb (Assistant Librarian, Central Library, A.S.I., Janpath, New Delhi) for their whole-hearted assistance in Library study. My heartiest thanks are also due to my friends Mr Ayaz Ahmed and Mr T. R. Suyal (A.S.I. Northern Circle, Agra) and to my former pupil Mr Brijendra Roy for their constant companionship and valuable assistance in outdoor study which forms the basis of this work.

I also thank Mrs Helen and Rev. David Reid Thomas (Professor of English, St. John's College, Agra) for their kindly correcting the ms. and improving the literary presentation of this work in accordance with the opinion of the examiners. I do not think I could have done it otherwise and I am, indeed, greatly obliged to them.

I do not know how to express my gratitude to Professor Dr Niharranjan Ray (Professor-Emeritus, Calcutta University) for the help and encouragement I have always received from him. His blessings are my greatest source of inspiration. This book is respectfully dedicated to him.

I am also thankful to the Indian Council of Historical Research for the grant of a subsidy for publication of this work.

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Responsibility for the facts stated, opinions expressed or conclusions reached, is entirely mine and the *ICHR* accepts no responsibility for them. Messrs Motilal Banarsidass deserve my compliments for their publishing it so nicely well.

Lastly, I express my profoundest thanks to my teacher Professor G. L. Mukerji (Professor-Emeritus, St. John's College, Agra) who has always been my guide and preceptor; to Pandit M. K. Saraswat whose valuable suggestions open up before me some new vistas of investigation and who kept me on the right track amidst the most wavering moments; to my wife Savitri who has always shared the trying moments calmly and patiently; to my daughters Veena, Neelima and Sandhya and to my son Ajay Nath whose assistance, howsoever meagre in volume and tiny in proportions it was, was always easily and most readily available to me.

Gwalior :
30th May 1975

Dr. R. NATH
M.A., PH.D., D.LITT.
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INTRODUCTION

IT is unfortunate that the foundations of historical studies in India were laid under very abnormal conditions towards the end of the 18th and the beginning of the 19th century. The British, with only a handful of their compatriots, were largely dependent on the co-operation and collaboration of the natives to keep the territories, of which they had become master with the capture of Delhi and Agra in 1803, under their possession and control. They were very hard-pressed by hostile forces on all sides. They had overthrown the Muslim rule and had deprived thousands of Muslim aristocrats, e.g. princes, nobles, Ulema, officers and military-men — and those who were dependent upon them, of their jobs and their fortune and, naturally, the latter were their bitterest and most dangerous antagonists. They were seething with unrest and reproachfully complained of the change which had ruined them. This difficult situation required the British to ponder over the matter thoughtfully and work out a policy which could guard against the displaced Muslim aristocracy and liquidate the imprints which it had left on the cultural life of the people at large. The glamour of the Muslim heritage was then fresh in their memory and it constituted an important factor in the Indian social order.

The need for these precautions was plainly apparent and one has simply to put himself in the dangerous situation of the early 19th century to grasp its spirit. The British who were dealing with Napoleon Bonaparte in Europe (A.D. 1804-15) and, after him, with such an astute statesman as Metternich at the Vienna Congress (1815), understood it well and they prepared themselves to meet the ordeal accordingly. It was not a temporary clash of arms with limited repercussions. More delicate and more dangerous than that, it was a clash of views and interests which would have wider meaning, further implications and far-reaching consequences.

The vast multitude of the Hindu masses, on the other hand, were either unconcerned with the distintegration of the Mughal Empire or sighed with relief, more out of a sentiment than because of a change in the nature of polity, which they rarely

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understood and which only remotely affected them. This class with a deep religious feeling, was susceptible to an emotional appeal and the British, with great tact and style, decided to make one. In various forms and features, through historical writings, their feelings were aroused, provoked and, sometimes, instigated against the Muslim rule of which they were the august supplanters. Recourse was taken to many sheer distortions of History, as for example, in the British expedition of Afghanistan in 1842 the Deodar Gates of the tomb of Mahmud of Ghazni were removed and brought to Agra, were ceremoniously identified as the famous Sandalwood Gates of Somnath which Mahmud had sacked in 1025 A.D.[1] and in the historic proclamation of 16th November 1842 it was declared that an insult of 800 years back had been avenged. There was no mistake and if there was, it was deliberate and part of a policy. Lord Ellenborough, the Governor-general, plainly wrote...."When we are sure of the hostility of one-tenth (i.e. the Mussalmans), not to secure the enthusiastic support of the nine-tenths (i.e. the Hindus) which are faithful.... I would make the most of our successes and of the recovery of the gates of the temple, treating it ostensibly as a great military triumph, but knowing very well that the Hindoos will value it as the guarantee of the future security of themselves and their religion against Mussalmans. All those who best know India tell me that the effect will be very great indeed and I think it will....I have every reason to think that the restoration of the gates of the Temple of Somnath has conciliated and gratified the great mass of the Hindoo population. I have no reason to suppose that it has offended the Mussalmans; but I cannot close my eyes to the belief that *that race is fundamentally hostile to us, and therefore our true policy is to conciliate the Hindoos.*"[2]

Likewise, the torso of a stone horse was carved and ceremoniously planted near the Akbar Darwaza of Agra Fort. It was declared, of course wrongly, that this represented the horse which helped the valiant Rathor Chief Rao Amarsingh to escape

1. For some details, reference may be made to this author's article 'The Counterfeit Gates of Somnath', *The Sunday Standard*, 4th February, 1968.

2. Cf. B. D. Basu, *Rise of the Christian Power in India*, Vol. V, pp. 84-89.

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from the Durbar after killing Mir Bakhshi Salabat Khan before the Emperor in full court, and it was on the back of this horse that the Rao jumped over the ramparts across the moat. What a heroic Rajput feat against the Muslim overlord ! The Gate was renamed as Amarsingh Gate which it still bears while the original name has been forgotten. Col. James Tod, the British diplomat in the land of the Rajputs had an extra motive when he compiled his Annals and Antiquities of Rajasthan. It was designed to bring Rajput valour and chivalry, which no doubt there were as part of the existence of this martial race, into limelight. They were even eulogized for fighting and dying in thousands for the hand of a beautiful maiden whom their chief espoused, or for an act of Jauhar which was a social retardation of a polygamous people. The Mussalman onslaughts were depicted, no doubt accurately, as full of plunders, massacres and arson. It was this way that the tactically barren and politically non-consequential battle of Haldighati became the most famous and probably the most important battle of medieval India ! The Muslim rule in India was portrayed as an utterly ignominious period in which the destructive forces let loose by the Mussalmans, had attempted to denude the country of its wealth, beautiful temples, arts, crafts, religion and culture. It was an appeal to the Hindu bias in which, unfortunately, was sought the promotion of British interests in India.[3]

It was this way that the foundations of historical studies were laid about the beginning of the 19th century and during the

3. It may be observed that attempts were made, about this time, to obliterate the living memorials of the medieval period, which could only be deliberate. Scores of gardens, tombs and palaces which once adorned the suburb of Sikandara, at Agra, right bank of the river Yamuna from Balkeshwar to the Taj Mahal and the left bank from the Buland Bagh to Mehtab Bagh were sold out or auctioned; relics of the glorious age of the Mughals were either destroyed or converted beyond recognition and even an officer of Alexander Cunningham's conscience, perseverance and discretion could not reclaim them when he took over as Director of Archaeology in 1862. Out of 270 beautiful monuments which existed at Agra alone, before its capture by Lake in 1803, hardly 40 have survived ! It is astounding that the Taj Mahal itself was put on auction for the value of its marble, and, but for the timely intervention of a conscientious military officer, this most beautiful and wonderful monument of the medieval period would have been dismantled and lost to us ! It would have certainly left the medieval period barren and barbarous.

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first half of it.[4] The History of medieval India, thus, was given a specific colour, which could be reflected in consonance with British interests at a 'right'-angle through the political prism of the country, deliberately by those who knew the delicate issues of this policy, and unconsciously, and of course innocently, by others who simply followed the official or the conventional line, later on. The trend of this writing continued throughout the whole of the 19th century and even thereafter, when the British line was faithfully followed by some Indian writers.

There is no doubt that some brilliant scholars detected this bias of History and brought the mischief which it was perpetuating in the cultural life of the country and the danger which it was posing to the social harmony of the people, to the notice of the intellectuals of the age. These scholars, in addition to the conscientious and honest British orientalists who stood by them, attempted to write History objectively and impartially. The names of Dr Hiralal, H. P. Sastri, G. H. Ojha, K. P. Jayaswal, B. D. Basu, R. D. Banerjee, R. G. Bhandarkar, R. C. Dutta, A.K. Coomaraswamy, Jayachandra Vidyalankar, M. G.Ranade, T. N. Dass, V. K. Sarkar, S. K. Chatterjee, R. N. Saletore, Sir Jadunath Sarkar, R. C. Majumdar and G. S. Sardesai may be mentioned in particular.[5] But generally the historians of medi-

4. Undeniable is the fact, however, that we owe a debt of deep gratitude to the British pioneers in the field of archaeology, epigraphy and numismatics who revealed to us the glories of our past. But for their great labour and research, the edicts of Aśoka, the stūpas of Sāñchi and Bhārhut, the Cave temples of Kārle and Bhāja and the frescoes of Ajanta could neither have been known to us, nor their aesthetic value and import have been assessed. Nor indeed we could have known the meaning of Punch-marked coins or have deciphered the legends, whether in Brāhmī or Kharoṣṭhi, which have since then more often than not played an important and at times a decisive role in the reconstruction of our ancient history. But these pioneers were independent scholars (of Ancient Indian History) and were not connected with British Imperialist policy or with its systematic effort to look down upon everything Indian to belittle its past and to follow a policy of introducing into the Indian social order seeds of abiding dissension. The Muslim heritage, in particular, was the target of this policy.

5. As for example, Jayachandra Vidyalankara (Cf. *Bharatiya Itihas ka Unmeelan* (Hindi) 6th ed. Allahabad, 1970) quoted an inscription on the coins of such an infamous invader as Mahmud Ghaznavi, it being a Sanskrit translation of the Islamic creed the kalma, viz., अव्यक्तमेक मुहम्मद अवतार नृपति महमूद अयं टंको महमूदपूरे घटे हतो जिनायन—संवत्.....

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eval India continued to write their histories with stereotyped details of functions and ceremonies, marches and hunts, mansabs and reforms, wars and battles and feuds and accessions — in other words, with the rise and fall of dynasties, interspersed with a large number of anecdotes — to make History interesting and humorous. Not only the observations but also the interpretations thereof have been generally subjective.

In a word, it was the denial, and the negation, of the constructive role of the medieval period towards the evolution of Indian culture. It was a study in a particular setting without an evaluation of the trends and currents of the age and the forces which were at work in the substratum. Sometimes it was even branded as a Dark Age, and its achievements were either ignored or grossly under-estimated.[6] Without insight into the spirit of the period as a whole many hasty, sweeping and premature conclusions were deduced. The constructive part was submerged under the accounts of demolitions of temples, imposition of jaziya and several other humiliating disqualifications upon the non-believing subjects, and ruthless massacres. Obviously, it was a one-sided assessment of History.

(La Ilaha illillah, Muhammad Rasul-allah—King Mahmud, this coin minted at the mint of Mahmudpur (Lahore) in the Hijri year.....) (p. 336). (See photograph of this inscription on p. 333 Cf. *Ibid*). He analysed his virtues and vices without bias and did not brand him 'a vandal' outright. Likewise, Ojha wrote an objective history of the Rajputs and depicted their society bringing out their vices of opium-addiction, infanticide, adultery and a policy of 'minor issues for major battles' without reservations. True to their muse, these historians sought to depict the truth of history. Sir Jadunath's maxim of the study of History may also be quoted in this reference : "I would not care whether truth is pleasant or unpleasant, and in consonance with or opposed to current views. I would not mind in the least whether truth is or is not a blow to the glory of my country. If necessary, I shall bear in patience the ridicule and slander of friends and society for the sake of preaching truth. But still I shall seek truth, understand truth and accept truth. This should be the firm resolve of a historian."

6. It may be observed that even this day a set of self-styled historians are trying to nullify the cultural achievements of the Muslim rule in India, by resorting to various strategems. Reference may be made in this connection to the recent controversy which raged in the *Hindustan Times* on the subject of Rewriting Indian History and to this author's warning letter in the *Hindustan Times* of 4th February 1973.

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It is inevitable, in order to undo the damage which has been done and to fill in the miserable gaps, that we follow the dictum that History is not a mere compilation of facts, or a subjective interpretation thereof, but an insight into the moving process of life, precisely an evaluation of the characteristic trends and currents of an age and the forces which bear them out. It is not a chronicle like the one Abul Fazl has presented or his modern incarnations have represented !7

This is particularly applicable to the study of the history of Mughal Architecture. The subject has been continuously neglected or misunderstood or viewed from the outskirts. It has not been realized that the history which is writ large on the monuments at Agra and Fatehpur Sikri, if deciphered, can give access to the spirit of the age which brought them out. They preserve the most faithful, and most authentic, record of the contemporary society; of the faiths and beliefs, tastes and temperaments and aesthetic standard and art capabilities of their builders. These monuments provide a key to the habits, thoughts and aspirations of the people who brought them into form. "Architecture constitutes a veritable chronicle in stone" which man can neither forge as Abul Fazl has sometimes done, nor pollute with his personal bias as Badaoni has generally done; "without a knowledge of this art," observed Sir Banister Fletcher, "the history of any period lacks that human interest with which it should be invested. The study of Architecture opens up the enjoyment of contemplating buildings with an appreciation of their purpose, meaning and charm and every structure conjures up the conditions of past ages. It is the one art with which we are all brought into daily contact, for it shelters us from the elements, gives us 'Home' and enshrines the sacred symbols of all religions. Finally Architecture is the mother of the arts of Sculpture, Painting and the allied Decorative crafts. The History of Architecture is a record of continuous evolution. ....Architecture, striding down the ages, was evolved, moulded and adapted to meet the changing needs of nations in their

7. Goethe's observation is also useful in this connection, "History must from time to time be rewritten, not because many new facts have been discovered, but because new aspects come into view, because the participant in the progress of an age is led to standpoints from which the past can be regarded and judged in a novel manner." (Cf. B. D. Basu, *Rise of the Christian Power in India*, (2nd ed. 1931) (Preface, p. 1).

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religious, political and domestic development. A glance along the perspective of past ages reveals architecture as a lithic history of social conditions, progress and religion and of events which are landmarks in the history of mankind; for as architecture is in all periods intimately connected with national life the genius of a nation is unmistakably stamped on its architectural monuments....Throughout the history of human race, architecture, the mother of all arts, has supplied shrines for religion, homes for the living and monuments for the dead."[8]

Architecture reflects the spirit of an age as faithfully as literature; "Art is not stone, brick, words or tricks of trade; it is above all the reflection of the artist's soul, the visible expression of the forces which drive him, and architectural technique, like language, is only a means of expression, an instrument in the service of the mind. In the same way that what first matters in literature is the writer, what counts in architecture is the architect. What counts in the architecture of a people is the collective soul of that people."[9] The spirit of an age is faithfully mirrored in the contemporary literature and then, gradually, it filters into arts and architecture imperceptibly, almost unconsciously, and this way the study of an architecture is the study of that people, in right earnest.

This study is more enlightening, and more instructive than that of the political aspect or the military affairs of a regime; "If less exciting, the peaceful history of industry and art is at least more elevating than much of that dispensed in text-books or proclaimed by sculptured rocks — history of the conquests and defeat of armies, the rise and fall of empires — often little more than one long horrible revelation of the greed, the vanity, the duplicity and the cruelty of man."[10]

It would be extremely fruitful from the historical point of view to study the period from A.D. 1526 to 1707, and to realize that some great men with vision, understanding and taste ruled over

8. Cf. *A History of Architecture* (On the Comparative Method) (16th ed. London, 1956) Preface, p. XI and p. 4.

9. Andre Godard, *The Art of Iran* (Heron & Rogers) (London, 1965) pp. 254-55.

10. W. J. Furnival, *Leadless Decorative Tiles, Faience and Mosaic*, (Staffordshire, 1904) p. 23.

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India. They kept their hand on the pulse of the nation and introduced revolutionary reforms, in accordance with its spirit, in polity, administration and society. Of more concern, and greater implications, is their innate aesthetic sense — and their keen interest in raising enduring memorials of their age. It is surprising that during only a short period of about 100 years (from Akbar to Shah Jehan 1556-1658), more than 500 tombs, mosques and palatial mansions were built at Fatehpur Sikri, Agra, Delhi and Lahore, some of which rank among the most beautiful and the most wonderful monuments of the world.[11]

Their personal interests, tastes and inclinations shaped their style. Mughal architecture was consequently a court-art in essence, depending solely on personal patronage. "The one great distinction of Mughal from Hindu art is not so much racial as social; the former is an art of courts and connoisseurs owing much to individual patronage, the latter belongs as much to the folk as to the kings."[12] Though it largely drew inspiration from the ancient Indian architectural traditions, it differed from any style of ancient Indian architecture in spirit and in substance, inasmuch as it was neither a folk-art nor a sacred architecture used in the service of a religion; even the Mosque was not an embodiment or representation of the religion of Islam. Free from any religious bias or preferences, Mughal architecture is essentially a secular art with unreserved emphasis on the aesthetic aspect which is usually its determining factor, in one way or the other.

The reflection of the builder's personality in the architectural style was a new and somewhat fresh element in Indian art. Hitherto, Indian art and architecture had been stylized to a point of infertile reproduction, though, all the same, it continued to be a living tradition. The social and artistic ingenuities of the Mughals brought a fresh breeze, and gave new life to Indian

11. See Appendix—'A', for a chronology of some of these important buildings.

12. A. K. Coomaraswamy, *The Arts and Crafts of India and Ceylon* (London, 1913) Preface, p. VI. In another reference, he again noted, "Mughal art, like the Mughal emperors, gradually became a definitely Indian thing; not however at all like the Rajput painting but realistic in method and personal and historical in interests," Cf. *Introduction to Indian Art*, (Madras, 1923) p. 128.

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art and revitalised it into fresh activities which were undreamed of in the preceding ages. The most outstanding examples are the so-called Diwan-i-Khas column of Fatehpur Sikri and the Taj-Mahal which, each one, is unique in itself though true to the architectural tradition of the remotest past. We meet with the Egyptian obelisk and the Temple; the Assyrian Tower and the Ziggurat; the Buddhist Lat and the Stūpa; the Tower of Pisa and the Cathedral; the Minaret-al-Malwiya of Samarra and the Mosque; and the Hindu Dhvajastambha and the Prāsāda as the two outstanding symbolic structures of each glorious epoch of the past. Even the otherwise turbulent Sultanate age has the Qutub Minar and the Tomb of Sher Shah as representatives of these traditional constructions which have, however, found their best and the most perfect expression in the Diwan-i-Khas of Fatehpur Sikri and the Taj-Mahal respectively. While the Buddhist Lat and the Hindu Dhvaja-stambha on the one hand and the Stūpa and the Prāsāda on the other are abstract symbols used in the service of one or the other religion, the Diwan-i-Khas column and the Taj-Mahal are as much representative of the age to which they belonged as of the personality of their builders, viz., Akbar and Shah Jehan respectively; they are as much symbols of the trend and current of the period and the predominating theme of the architectural style, i.e., aesthetics as of their personal beliefs and faiths. This is the greatest and the most important contribution of the Mughals to the development of Indian art.

There are many contributory factors to the aesthetic qualities of an architecture. Site and lay-out play an important part and equally significant is the participation of setting, i.e., garden and water-devices, and back-ground of a building in its total impression. Then, an artistic architectural effect is obtained by manipulation of some structural features such as elevation of the structure, proportionate and symmetrical combination of its parts, admixture of lines on the one hand and solids and voids on the other, and the superstructure. Besides these environmental and structural features, the architect may adopt purely decorative means to give his work a substantial aesthetic character. These are two-fold : carving and colour-schemes on the one side, and motifs and designs on the other. While the ancient Hindus chiefly relied upon sculpture and carving for architec-

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tural ornamentation, the Mughals with their proverbial love of colour, took recourse to almost all the decorative schemes which had been introduced into India subsequent to its conquest by the Muhammedans, and though they made sufficient use of the ancient Indian decorative technique of carving and sculpture, they did not confine their aesthetic expression to 'chiselling' only but freely utilised glazed-tiling, painting and stucco, and mosaic and inlay arts, in their various ramifications. More important than this is the fact that they liberally employed almost all types of motifs and designs which were then in vogue in the Orient, including such typically Islamic representations as arabesques calligraphicals, geometricals and stalactite on the one hand, and the animate and symbolic motifs like padma, cakra and gavākṣa of the Hindus on the other. Their representations had a long historical background, geographically as far distant as Mesopotamia and China, and chronologically as deep in the past as the Vedic age.

Noteworthy is the fact that the appearance of a motif or design which we come across in Mughal art is not an isolated event. It might have travelled over a long distance before being introduced into India and before being adopted in such a refined way by the Mughals. Arts do not spring up suddenly; they are developed slowly and gradually. Arts have a long, continuous and almost unbroken history. The means of aesthetic expression travel unobstructedly and unconsciously from one continent to another because the appeal of beauty is spontaneous and universal. There were dangerous antipathies to the spread of religions but not so to the spread of arts. Religion is sometimes enforced; art is always voluntarily accepted, developed and preserved. Art is not carried on the banners of the invading armies; it comes almost unnoticed. Something that appeals to the artist is adopted and is ultimately incorporated in the art of the region. Mughal decorative art, thus, can only be studied in the perspective of the historical background, not as an isolated phenomenon. It can be studied only with reference to the inspirations it has derived from distant and remote sources in Mesopotamia and China, as significantly as in India.

That in whatever fragments it has been studied it has always been evaluated independently as an expression of an isolated movement of artistic activities in the medieval ages without

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reference to the historical background, is the most unfortunate aspect of its study. It has rarely been understood as a link in the continuous growth of the art of the nation. It is, therefore, needful that a detailed study of the evolutionary process of every aspect of this art in its different phases be made, that it be salvaged from its bewildering isolation and that its links with the sources of its inspirations : ancient Hindu, Persian or Chinese, as was case in each instance, be re-established. The Mughal style has to be studied, thus, as a continuous development growing through the accretion of various shapes and forms, methods and schemes, and motifs and designs. In effect, it would be the evaluation of the following phenomena :

(a) the continuity of the architectural tradition from the ancient to the medieval period;
(b) the evolutionary process and its sources of inspiration;
(c) the constructive role of the medieval period in Indian culture, particularly the artistic achievements of the Mughal rule in India; and
(d) the trends and currents of the medieval age and the forces which were at work *vis-a-vis* the Mughal architecture.

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Chapter I

THE DEPICTION OF SYMBOLIC MOTIFS IN MUGHAL ARCHITECTURE

Indian art lays emphasis not only on the outer form (rūpa) but also on the inner meaning (artha). "Without meaning art is jejune."[1] It is not an art for art's sake; but an art for life's sublime ideas.[2] The mission and purpose of Indian art is to convey these ideas through the language of symbols which while representing a meaning in an outer form were used for ornamentation by followers of all religions in all ages. This way these symbols though they appear to be art motifs are vehicles of valuable ideas, a study of which gives an insight into the cultural trends of the people who employed them. The appearance of a motif in any phase of Indian art is not an accident or a miracle. "It is not an exotic phenomenon which is introduced for a while and then discarded. It is rather a natural thing which grows from inside the tradition and is the fruit of an intelligent acceptance by the people,"[3] who pass it on from generation to generation, and it is this way that an art-evolution takes place in India.

From earliest times, Indian art has evolved from the basic concept that it is of auspicious character (bhadrakṛta) and thus the symbols and icons which developed in Indian art were essentially philosophical-religious dicta. For example, the archetypal mark Svastika was a solar symbol representing the cosmic order in its fourfold manifestation as measured out by the Sun. These auspicious symbols were the growth of the religious thought of the ancient Indians.

1. V. S. Agarwal, *Indian Art* (Varanasi, 1965) p. 55. "Indian aesthetic canon seeks beauty both in form and meaning". Cf. V.S. Agarwal, *Chakradhvaja* (Varanasi, 1964) p. 7. As a matter of fact purely ornamental motifs did not find favour at the hands of the Indian artists who laid more emphasis on 'artha' (meaning) than on 'rūpa' (form).

2. "Western art at all times tends to representation, Indian to Symbolism", Cf. A.K. Coomaraswamy *Introduction to Indian Art* (Madras, 1923) p. 41.

3. V.S. Agarwal, *Studies in Indian Art*, p. 66.

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They have been freely depicted by all denominations, viz. Buddhists, Jainas and Brahmanicals, without discrimination and no religious ownership or exclusive affiliation can be claimed for them. "They were the creations of the soil[4] and belonged to the whole people without distinction of race or faith. It is this open welcome that we find writ large on the face of ancient Indian art, religion and literature. In the case of hundreds of such motifs including the kalpavṛkṣa, kalpalatā and a host of tutelary divinities (vyāntara-devatās) we have to consider[5] a symbol as having a universal appeal to the people of the land at large irrespective of their sectarian affiliations. "This universal aspect should never be lost sight of, otherwise the meaning of the symbol would be vastly curtailed and instead of its serving as a pulsating centre from which many facets of meaning emanated, the symbol would become stereotyped and cut off from its eloquent source. . . . The whole Indian civilization stands in the background of our investigation into the meaning of these motifs."[3] As if they belonged to a universal cult and a common culture heritage, they were liberally accepted in all walks of Indian society, in all branches of Indian religious thought and in all phases of Indian art. For example, cakra was the revolving wheel of Time symbolising the Cosmos in its rhythmic or cyclic movement. Originally a Vedic symbol, it became the Dharmacakra of the Buddha and Mahāvīra, and Sudarśanacakra of Viṣṇu. This universal, almost non-sectarian character of Hindu art[7] is its most important fundamental.[8]

4. At least some of them were symbols of a Western Asiatic Culture which was commonly inherited by India in a remote past, see A. K. Coomaraswamy, *History of Indian and Indonesian Art*, (Dover ed. 1965) pp. 11-14.

5. V. S. Agarwal, *Chakradhvaja*, *op. cit.* p. 14.

6. *Ibid.* pp. 14-15.

7. When we use the word 'Hindu' in this context we mean an ancient Indian culture comprising Buddhist, Jaina and Brahmanical. 'Hindu' is an abstract term signifying not a particular caste or creed, not a particular society or religion but a people in a cultural millennium.

8. The sectarian classification is the greatest defect of James Fergusson's investigation of Indian art and architecture. He does not seem to have grasped the spirit of Indian culture and without understanding its fundamental concepts deduced some sweeping and hasty conclusions which add confusion to ignorance. Coomaraswamy rightly observed, "For just as in the case of sculpture, there are no Buddhist, Jaina or Brahmanical styles of architecture, but only Buddhist, Jaina and Brahmanical buildings in the Indian style of their period. The Indian temple (Vimāna) is one; but there are provincial variations in its formal development, existing

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Some animate symbols of the Hindu art were matsya (fish), kūrma (tortoise), varāha (boar), mṛga (deer), siṃha (lion), aśva (horse), hastin (elephant) and nāga (serpent). Some were mythical motifs as garuḍa, haṃsa, makara and śārdūla. Grotesque creatures and composite animals (Īhāmṛga) were also evolved on a large scale. Among the vegetational motifs of the Hindu art kalpalatā, padma (lotus), vaṭa, mālā, tāla (palm) and mucakunda (honeysuckle) are most important. Besides these motifs, a large number of symbolic objects conveying philosophical ideas and concepts were also evolved in Hindu art, among which the pūrṇaghaṭa (kalaśa), yūpa, stūpa, cakra (wheel), svastika, śrīvatsa, triratna and aṅkha (conch-shell) were most popularly used. Eight auspicious symbols, i.e., Aṣṭamaṅgalas of the classical Indian art which were commonly used by the Buddhists, Jainas and Brahmanicals alike were selected from the above list. They are as follows:[9]

(1) Mīna-Mithuna
(2) Deva-Vimāna Gṛha
(3) Śrīvatsa
(4) Vardhamāna
(5) Triratna
(6) Puṣpadāma
(7) Indra-Yaṣṭi or Vaijayantī
(8) Pūrṇaghaṭa

The Delhi Sultanate period was an age of cultural conflict and the theocratic outlook prevailed. The State was essentially

side by side with the secular variation in pure style," Cf. *History of Indian and Indonesian Art*; *op. cit.* p. 106.

9. V.S. Agarwal, *Indian Art*, *op. cit.* p. 159; Agarwal gives a different list in *Chakradhvaja*, *op. cit.*, p. 14, e.g.,

(1) Svastika
(2) Śrīvatsa
(3) Mīna-Mithuna
(4) Vaijayantī
(5) Devagriha Vimāna
(6) Ratnapātra
(7) Pūrnaghaṭa
(8) Mahāsrak (The Great Garland)

Only five symbols are common to both the lists. Svastika does not find a place in the first list while cakra and padma are absent from the both. There does not seem to be a hard and fast prescription for their exclusive use and the list, either way, is tentative. There was, as a matter of fact, such a wide variety of these auspicious symbols available at hand to the Indian artisan that he could pick and choose according to the convenience of the occasion.

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They have been freely depicted by all denominations, viz. Buddhists, Jainas and Brahmanicals, without discrimination and no religious ownership or exclusive affiliation can be claimed for them. "They were the creations of the soil[4] and belonged to the whole people without distinction of race or faith. It is this open welcome that we find writ large on the face of ancient Indian art, religion and literature. In the case of hundreds of such motifs including the kalpavṛkṣa, kalpalatā and a host of tutelary divinities (vyāntara-devatās) we have to consider[5] a symbol as having a universal appeal to the people of the land at large irrespective of their sectarian affiliations. "This universal aspect should never be lost sight of, otherwise the meaning of the symbol would be vastly curtailed and instead of its serving as a pulsating centre from which many facets of meaning emanated, the symbol would become stereotyped and cut off from its eloquent source. . . . The whole Indian civilization stands in the background of our investigation into the meaning of these motifs."[3] As if they belonged to a universal cult and a common culture heritage, they were liberally accepted in all walks of Indian society, in all branches of Indian religious thought and in all phases of Indian art. For example, cakra was the revolving wheel of Time symbolising the Cosmos in its rhythmic or cyclic movement. Originally a Vedic symbol, it became the Dharmacakra of the Buddha and Mahāvīra, and Sudarśanacakra of Viṣṇu. This universal, almost non-sectarian character of Hindu art[7] is its most important fundamental.[8]

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militant and religious prejudices guided the course of its activities. There were large scale prohibitions and cultural exchange between the two people was curtailed. Little conscious effort was made to accept and adopt each other's values and norms and whatever fusion of the two cultures took place resulted from unconscious penetrations. The use of such a typically Hindu element as āmalaka on the domes of the mosques and tombs of the Sultanate period as its crowning member may be quoted as an illustration of this phenomenon.

It was, however, different with the Mughals. They introduced into medieval India a spirit of cultural eclecticism, almost against the theocratic conception of Islam. They were tolerant and refused to be led by the Ulema point of view. Babur firmly warned his son Humayun against any religious prejudice and advised him to pay due regard to the religious susceptibilities of the people of Hindustan.[10] They mixed with them and accepted many of their beliefs. Superstition being one of the characteristic trends of the medieval age, Hindu astrology, divination and magic impressed them the most. As Elphinstone remarked, "The miracles of the Yogis were related by the orthodox writers with as perfect a conviction as could have been given to those in the Quran; witchcraft was universally believed; omens and dreams were paid the greatest attention to."[11] Humayun believed in astrology and arranged his court according to the four elements : 'Fire', 'Air', 'Water' and 'Earth' and even prescribed the clothes for wearing each day corresponding to the colour of the planet of that day.[12] His audience-hall had seven chambers named after seven stars and each was used according to the influence of its presiding divinity.[13]

The accession of Akbar in 1556 A.D. marks the beginning of an era which is not only noted for the tolerant attitude of

10. M.L. Roychoudhury, *The Din-i-Ilahi*, (Calcutta, 1941) p. 47 quoted from a manuscript in the State Library of Bhopal.

11. *History of India*, p. 476, Cf. *Ibid*. p. 50.

12. Ishwariprasad, *The Life and Times of Humayun*, (Calcutta 1956) pp. 52-57; also see *Qanun-i-Humayuni* of Khwandamir (tr. Baini Prashad) (Calcutta, 1940) pp. 23-59 for details.

13. Rampran Gupta, *Mughal Rajbansha*, p. 106, viz., (a) The Moon-Chamber for poets, travellers and ambassadors; (b) The Mars-Chamber for religious law-givers and administrators; (c) The Mercury-Chamber for warriors and soldiers, etc. Cf. Roychoudhury, *op, cit*. p. 51.

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the State towards its non-believing subjects but also for a sincere and genuine effort to bring about a cultural fusion of the Hindu and the Musulman by free acceptance of the popular beliefs of the former. It was something more than the adoption of the Rajput dress, the customs of tulā-dān and jharokhā-darśan, the festivals of Diwāli and Rakṣā-bandhan and the rituals of the Durbar. It was almost a conversion to the aesthetic and philosophical values and norms which the Hindus had been following from times immemorial. It is this liberal trend of the age of Akbar the Great, which is the most remarkable phenomenon of the medieval History of India.

Akbar invited the guilds (salāts) of indigenous artisans from Gujarat and other provinces where they had been practising their traditional art for centuries continuously, almost undisturbed by the political upheavals. He employed them on the construction of his buildings at Agra and Fatehpur Sikri and gave them full freedom for the display of their art. Unrestrained by any orthodox tenet, as they were during many a regime in the Sultanate period, and equipped with a ready, prosperous and liberal patronage, the indigenous workers set out to work wonders in stone.

And work they did in their own way. While engaged on Mughal monuments, they were released even from the bonds of their own śāstraic prescriptions which had more often than not restricted their liberty of action. The buildings which thus came up combined the superb exuberance and grandeur of the indigenous art with the vitality and dynamism of the new inspiration which the patrons most aesthetically provided.

Not only the aesthetic impression, but symbols and icons also passed into these works at the hands of the indigenous builders. E.g., the monuments of Akbar at Agra and Fatehpur Sikri contain many art motifs like cakra, padma, śrīvatsa, pūṇa-kalaśa, svastika and gavākṣa which the Hindus had employed symbolically in their religious shrines for two millenniums. It is this way that a unity and continuity in the art of India, not found in any other racial tradition, is maintained from the earliest times to at least the beginning of the modern age. And it is also this way, conversely, that Mughal art became a definitely Indian thing.

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The Mughal art which thus developed in the hands of the indigenous builder was mainly a court-art depending on the connoisseurship and individual patronage of the Emperor or the noble, so unlike Hindu art, which is the art of the people at large and in common. Free from any religious bias or preferences, Mughal art is essentially non-sectarian if not purely secular.

Each motif of ancient Indian art had a meaning and it was used with this symbolism in view. It has to be analysed in each case whether the same formula of art was used in Mughal art symbolically or merely with ornamental objective.

(a) *Pūrṇakalaśa*

Pūrṇakalaśa which is also known as Pūrṇakumbha, Pūrṇaghaṭa and Maṅgalakalaśa, is one of the eight auspicious symbols of the classical Indian art (aṣṭamaṅgalas). It is a symbol of plenty and creativity[14] and its conception goes as far back as to the religion of Ṛgveda.[15] "It is the emblem par excellence of fulness and prosperity, of life endowed with all its gifts...the full blooming overflowing contents of life are comparable to the plants and foliage luxuriating from the mouth of a jar filled with the life-giving fluid."[16] It represents beauty, art and life in fulness, "signifying the one becoming the many and the created many attuned to the universal whole."[17]

It has been popularly depicted as an auspicious symbol in Indian art and the examples abound at Mathura, Sāñchi, Bārhut, Sārnāth and Amarāvatī. It is generally associated with Lakṣmī (Śrī-Lakṣmī or Gaja-Lakṣmī) and with overflowing foliage composed of lotus buds, flowers and leaves. Apart from its depiction as an ornament carved on bas-reliefs, it was adopted for use architecturally with at least two prominent members, viz., with the column and the śikhara. It was used as capitals and bases with the former[18] and some of the earliest

14. V.S. Agarwal, *Indian Art*, *op. cit.* p. 51.

15. V.S. Agarwal, (Cf. *Studies in Indian Art*, p. 43) gives earliest references from Ṛgveda, e.g., III-32.15; VI-69.6; IX-97.33; IV-32.9; IV-27.5 and IX-62.19.

16. *Ibid.* p. 43.

17. *Ibid.* p. 45.

18. See for example P.K. Agarwala, *Pūrṇa-kalaśa* (Varanasi, 1965) figs. 28 to 34 and figs. 35 to 39 respectively.

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examples come from the Buddhist Caves. The pot and foliage capital became very popular in Medieval Indian architecture and it was this way that the symbol was conventionalized. It was also adopted to crown the finial, i.e., the āmalaka-śilā of the śikhara of the Hindu temple and thus it came to be known as kalaśa in its essential meaning. Here too it was primarily symbolic. "Above the Amalaka is the Stūpika, the finial, frequently made of gold or gilded. Its most conspicuous part is the round body of the jar, the Kalaśa. The Golden Kalaśa, a high seat on the summit of the God's dwelling, looks as if it were the Sun's orb that had arisen on the lordly mountain of sunrise. The kalaśa is likened to the Sun and the temple is the Mountain where the sun rests at midday. Meru the support of the Sun and the One Sun that never leaves the Meru...."[19] It was, however, a marvellous artistic formula which not only gave the āmalaka-śilā and the padmakośa (sheath of lotus-petals) a beautiful crowning but also provided a graceful culmination of the pyramidal effect of the rectilinear or curvilinear śikhara, an apex in which the rhythmically decreasing mass of the śikhara found an exquisite consummation. Its aesthetic character did not fail to impress the builders and it became a universal architectural expedient for surmounting the śikhara-finial with aesthetic emphasis rather than symbolic meaning in view. It is surprising that the kalaśa was used almost as a general rule to crown the domes of the mosques and tombs which were constructed during the Delhi Sultanate period which is noted for its theocratic outlook and a policy of religious discrimination and cultural exclusion. It was the beautiful impression of the kalaśa over a hemispherical structure that worked wonders on the imagination of those builders rather than the meaning of the symbol, which they hardly cared to understand.

The pūrṇakalaśa has been used as the base of a number of nook-shafts at the Jami Masjid of Fatehpur Sikri.[20] It has been

19. Stella Kramrisch, *The Hindu Temple*, Vol. II (Calcutta, 1946) p. 355 supported from various inscriptions and Aitareya Brāhmaṇa XIV. 6.44 etc.

20. E. W. Smith, the Mughal Architecture of Fatehpur Sikri, *A.S.I. New Imperial Series*, Vol. XVIII (4 parts) (Allahabad, 1894-98) Part IV, Plate XXVIII and LXXXII.

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carved as an ornamental motif on the pillars of the Panch-Mahal, chiefly on the capitals.[21] It is used in various forms along with the brackets of the sunk niches in the Jodhbāi's Palace as also in carved reliefs.[22] Some examples also come from the Jehangiri-Mahal of Agra Fort. It may, however, be noted that the pūrṇakalaśa was not as liberally used as the lotus and gavākṣa by the builders of Akbar and its use is limited to nooks and corners. When it is used for ornamentation, it plays a subsidiary role along with vegetational designs. As if the carvers of Fatehpur Sikri had a faint memory of the motif, they have hesitated to depict it boldly in broad day light. Probably they did not wish to adhere to the symbolism of the motif.

As a motif for mural ornamentation, it has disappeared at the Tomb of Akbar at Sikandara (Agra). The pots depicted at the Tomb of Itmad-ud-Daulah are wine-vases and are obviously Persian. Even when associated with overflowing foliage, it is a Persian guldasta rather than a Hindu kalaśa, which is conspicuously absent at this tomb.

Curiously, we meet with the pūrṇakalaśa motif frequently in the buildings of Shah Jehan. It has been used for mural ornamentation in painted designs, e.g. in the inner hall of the Khas-Mahal at Agra Fort. It is stuccoed and beautifully associated with glass-mosaic work at the Shish-Mahal in the same fort (Plate I). Some painted and stuccoed examples also come from the Shahjehani-Mahal. The best stucco specimens are met with at the Jharokha pavilion overhanging the Machchhi-Bhawan court in Agra Fort. Its pillars have a kalaśa base each, with overflowing foliage like the Hindu motif. It is a unique design and was, without doubt, inspired by the indigenous traditions of art.

It is depicted in carved marble on the square bases of the Diwan-i-Khas pillars again in Agra Fort (Plate II). The overflowing foliage in low relief combines marvellously with the inlaid design on its border. The kalaśa has also been carved in miniature on their capitals.

21. E. W. Smith, Part I, Plate LVI, LIX, LXIV and LXX.
22. E. W. Smith, Part II, Plate LXV and LXXXVIII.

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It is, however, at the Taj Mahal, on the dados of the cenotaph hall that the Pūrṇakalaśa motif has been represented in its finest form (Plate III). There arises from its mouth a spray of slender twigs bearing beautiful flowers and buds which hang over symmetrically on all sides, covering the central space of the dado between the inlaid borders. This vase and foliage motif is carved in graceful relief and combines delicately with the inlaid border. It is the kalaśa which bestows harmony and coherence, and the resultant grace, to the whole vegetational design, otherwise the plant alone would have become as ineffective as it is there at the Diwan-i-Khas in the Agra Fort. This is the best example of the ornamental use of the pūrṇakalaśa in Mughal art and can be compared with its counterpart from Amaravati which is the best of the ancient Indian art (Fig. 1). The former excels the latter by the sheer delicacy of details as also by the beautiful border in which it is gorgeously set. That its *raison d'etre* was entirely and wholly aesthetic can hardly be doubted.

Noteworthy is the fact that there is no lotus, or cakra, or chain-and-bell, or gavākṣa, or śrīvatsa, or svastika or any other typically Hindu symbol in the Shahjehanian buildings and the pūrṇakalaśa is the only motif which has been employed by the builders of this period, and that too on a large scale in a variety of schemes and designs and with refined details. The white marble buildings of this period have bold floral designs, both naturalistic and stylized, in painted, inlaid, carved and jali techniques. Stalactites have also been used almost universally on vaulted soffits. These are typically Mughal designs which had been inspired by various sources and had developed gradually through constant use. Such an emphatic and assertive depiction of these typically Mughal designs in the buildings of Shah Jehan gives an insight into the evolution of Mughal ornamental motifs. Originally the motifs were typically Hindu; in the age of Jehangir they borrow largely from Iranian sources. But it was during the golden age of Shah Jehan that the typically Mughal motifs were evolved, perfected and instituted and, without doubt, the kalaśa is reckoned among them.

This is further explained by yet another aspect of its use in Mughal architecture, i.e., on the domes as the most important part of the finial. The Mughal dome as well as the cupola and

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any other spherical superstructure, from Akbar to Shah Jehan, is crowned by a kalaśa finial which is essentially an Indian feature and is not met with in Iran or any other Islamic country. It is sometimes associated with āmalaka, e.g. on the chhatris of Akbar's buildings at Fatehpur Sikri and Agra Fort. Āmalaka too is a symbolic motif of ancient Hindu art.[23] The Mughal finial may thus begin with or without an āmalaka at its base, the kalaśa forming its main body with a number of subsidiary pots and discs used alternately along the whole height, and crowned by a triśūla, triratna, crescent or only a pointed spike. There may be a padmakośa at the base of this finial.[24] Originally there was uncertainty as to an effective combination of the finial with either āmalaka or padmakośa and the hesitation on the part of the builders of Fatehpur Sikri is well reflected by the use of all these features together on a number of chhatris without selection or discrimination. The norms, however, gradually emerged and the preference for the padmakośa rather than the āmalaka became so strong that the latter is absent in the buildings of Shah Jehan. The padmakośa and kalaśa provide a graceful combination and this expedient soon developed in the hands of the Shahjehanian builder to most magnificent heights. Sometimes the kalaśa finial reposing majestically on the overbearing padmakośa rose to the height of the dome itself and along with flanking chhatris amidst a cluster of pinnacles brought about a gorgeous skyline (Plate IV). It was in the manipulation of this superstructure that the Shahjehanian architect excelled and it is in this aspect of his art that the beauty and grace of his buildings blossom. Of course, kalaśa is used in all these examples more as an architectural element for aesthetic effect than for its symbolic representation which, however, could have been kept in view by the builders simultaneously though subsidiarily. It was then a typically conventionalized Mughal architectural feature without which no dome would be deemed to be complete.

(b) *Padma*

The padma (lotus) which has been depicted in the Mughal architecture abundantly in a wide variety of forms is also an

23. It has been discussed with the symbolism of the lotus separately.
24. This too has been dealt with separately along with the lotus.

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ancient Hindu symbol. It represents the principle of growth and denotes life floating on the surface of the creative waters.[25] It is the "prime symbol of creation, the seat and substratum of universal creative force which springs from the navel or centre of the primeval creator.... It is expressed as Brahma.... As the Lotus floats above water, so the created cosmos emerged to the surface of the primeval deep or 'chaos' which originally was the confused mass out of which the order of the Universe was evolved."[26]

The lotus symbol occupies an important position in Hindu Cosmology. Water is the source and support of all things and the lotus represents it.[27] "Rising from the depths of water and expanding its petals on the surface, the Lotus (kamala, padma) is the most beautiful evidence offered to the eye of the self-engendering fertility of the bottom. Through its appearance, it gives proof of the life-supporting power of the all-nourishing abyss. This is why the Goddess Lotus (Kamalā, Padmā) is an appropriate consort or Śakti of Viṣṇu—Viṣṇu being the cosmic water itself, the infinite ocean of that liquid life-substance out of which all the differentiated phenomena and elements of the universe arise, and back into which they must again dissolve... The universal living waters are symbolized in India as the snake Ananta, or Śeṣa, who supports the human form of the divine sleeper, Viṣṇu. At the beginning of time (according to the myth of the flowering of the universe) when the waters are to bring forth forms anew, there rises from the navel of Viṣṇu the golden bud of a lotus, which expands. This cosmic flower is a transformation of a portion of the substance eternally contained within the god's gigantic body. It is an epiphany of those dynamic forces of the creative process which had been

25. V.S. Agarwal, *Indian Art*, *op. cit.* p. 53.

26. V.S. Agarwal, *Studies in Indian Art*, *op. cit.* p. 47.

27. A.K. Coomaraswamy, 'Origin of the Lotus', *The Indian Historical Quarterly*, Vol. VI (Calcutta, 1930) p. 374; 'The lotus means the waters' (Śatapatha Brāhmaṇa, VII.4, 1, 8); 'Thou art the back of the waters' (*Ibid.* and Yajur Veda, IV. 1, 3 and 2, 8); 'This earth lies spread on the waters (Śatapatha Brāhmaṇa, *Ibid*); 'Growing to might as the lotus flower, do thou (earth) extend in width with the measure of heaven' (Yajur Veda, *Ibid*). Coomaraswamy held that "the original symbolic significance of the lotus, as representing the waters, which support the earth, is very clearly stated and there is no need to invoke the later mystical ideas about a world lotus and maṇḍalas" (Cf. *Ibid*).

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withdrawn into the body (that is to say, into the Cosmic Waters) at the time of the dissolution. It has now reappeared, to begin its cycle anew; and it will live again its perennial course. This radiant lotus of the world is the goddess Padmā, the śakti or divine energy of slumbering Viṣṇu. She is the awakening of his substance, in dream, as the miracle of life."[28]

The padma was adopted as a motif for depiction in Indian art from its earliest phases. Beautiful examples come from Bhārhut, Sāñci (Fig-2), Mathura, Amaravati and other ancient sites. Though in certain cases it has also been used architecturally as a capital, e.g. at Bhārhut, it is mostly used in circular medallions for bas-relief ornamentation. It is a popular art-motif during the Gupta age when it is depicted in various forms and it is from this phase that it became conventionalized. It is carved in incised relief, associated with other designs and human and celestial beings, in series on plinths, lintels and friezes in pleasing tones. Later its use became universal and examples abound in almost every religious shrine in every part of the country.

The lotus has been used on a large scale in Mughal architecture, in a variety of forms. It has been carved in bold relief on the spandrels of arches in circular medallions at Fatehpur Sikri, earliest at the Jami Masjid on the Badshahi Darwaza,[29] in the Dalans and also in the interior.[30] This is a popular technique of its depiction and is followed conventionally throughout the course of the development of Mughal art. At Birbal's Palace, it has been used, in bold carving in between the geo-

28. Heinrich Zimmer, *The Art of Indian Asia* (ed. Joseph Campbell) (New York, 1960) pp. 165-66. A.K. Coomaraswamy defined its symbolism in a different way as to its depiction in Indian art, "Growing in the mud and yet so clean, the lotus is a symbol of purity : a lotus-pool, with leaves and flowers in bud, widely opened, and again dying down, is an image of the ebb and flow of human life (Saṃsāra). Bodily centres of consciousness, such as the solar plexus, the heart and the brain, are represented in lotus forms, while the whole universe is sometimes imagined as one great flower whose petals are outlined by the starry worlds : in this last sense, probably, we should understand the flower held in the hand of Avalokiteshwara and other deities.... Most important, however, in art, is the representation of a lotus flower as the seat of a god, or beneath the feet of a standing figure of a god, a convention representing the fact that the feet of the gods do not rest on the earth" (Cf. *The Art and Crafts of India and Ceylon*, London, 1913, pp. 28-29).

29. E. W. Smith, *op. cit.* Part IV, Plate-V.

30. *Ibid.* Plates XXXV and XLIII.

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metrical designs for mural ornamentation,[31] on the ceilings[32] and, most effectively, in circular medallions on the brackets.[33] (Plate V). It has similarly been used at Jodhbai's Palace.[34]

The lotus is also employed for ornamentation at the Khwabgah, the Sultana's Palace, the Panch-Mahal, Salim Chishti's Tomb and as a matter of fact in almost all the palatial mansions of Fatehpur Sikri, big or small. The half-lotus motif in a semi-circle is met with at Khwabgah.[35] The best form in panel-decoration is found at the Sultana's Palace.[36] The lotus of Salim Chishti's tomb is gracefully carved in high relief in white marble with a 12-petal composition.[37] The Panch-Mahal lotus is shown on cornices, entablatures and also on the capitals of columns in medallions. The Jehangiri Mahal in the Agra Fort, which too is a red sandstone palace, also has some fine examples of the use of the lotus in bold relief. The depiction is more emphatic on the spandrels of ornamental arches on the Eastern and Western facades, like bold rosettes, than on the interior panels where it is used for variety with the geometrical designs with which it has been associated. Similar is the method of its employment at Akbar's tomb at Sikandara where the spandrels of the second, third, fourth and fifth storey arches have either cakra or padma medallions, sometimes with the Arabic word 'Allah' inscribed inside it.

Its use decreased thereafter and the examples are comparatively scarce at the Tomb of Itmad-ud-Daulah and in the buildings of Shah Jehan. All the same, as a graceful art-motif for use on spandrels of arches, instead of rosettes, its use continued throughout the age of the Grand Mughals. Noteworthy in this connection, however, is the fact that though the padma was generally depicted at a respectable height in Mughal art, its symbolism did not determine its representation so much as its aesthetic impression. It was without doubt considered to be an auspicious motif but it would not have

31. E. W. Smith, Part II, Plates-XVII and XXXVI.
32. *Ibid.* Plate-XV.
33. *Ibid.* Plate-XII.
34. See for example Plate-LXXI Cf. *Ibid.*
35. E. W. Smith, Part I, Plate-XVI.
36. *Ibid.* Plate-XXVI to XXVIII.
37. E. W. Smith, Part III, Plate-XVIII.

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been acceptable in Mughal decorative art without substantial aesthetic merit. Purely symbolic appeal made little headway in the development of Mughal art and greater emphasis was always laid on the aspect of beauty. It is primarily on this count that Mughal art differs from ancient Indian art, though the former borrows largely from the latter in fundamentals as well as in details. The latter is religion-oriented and nothing could exist within its precincts without a sublime meaning, while the former is secular and aestheticism is its determining factor.

The Egyptian water-lily (nymphia) has been depicted on a few capitals of the pillars of the Panch-Mahal at Fatehpur Sikri.[38] Its use, however, is limited to this building and does not recur thereafter. A common art motif of ancient Persia, it must have travelled with the Persian artists who seem to have introduced it here as an isolated formula without affinity with the traditional ornaments of the country or any idea behind it. The indigenous builder obviously did not accept it and the motif is not repeated.

The lotus was also used as fringe of lotus-buds around the arches, ornamental and functional in the red sandstone buildings. It was a beautiful formula of art which gave the arch a new definition and expression. A fringe of lotus-buds was used in a number of cases in the Delhi Sultanate period but, though the inspiration of its use seems to have been derived from these earlier examples which were well known to the Mughal builder, it is in his hands that the device has been most gracefully employed.

A fringe of lotus-buds has been used emphatically over entrances, as also with the ornamental arches, in the Birbal's Palace at Fatehpur Sikri.[39] The Jami Masjid has some beautiful examples on arches (Plate VI) and on its mihrabs[40] and at the Badshahi Darwaza.[41] The ornamental arches of the Eastern and Western facades of the Jehangiri-Mahal in Agra Fort have a fringe of lotus-buds; some are of red sandstone while others are carved in white marble and the change of

38. E. W. Smith, Part I, Plate-LXX and LXXI.
39. *Ibid.* Part II, Plate-XVII, XXXVI, XLI and XLII.
40. *Ibid.* Part IV, Plate-XXXII, XLII, XLIII and XLVIII.
41. *Ibid.* Plate-V.

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texture has brought about a unique combination. It has also been used in the interior decoration of upper pavilions. Then it appears with the ornamental arches of the East and West gateways of the Akbar's tomb at Sikandara. It was not used thereafter either at the Tomb of Itmad-ud-Daulah or in the buildings of Shah Jehan. It was not only because of the change from red sandstone to white marble but also due to a change in the style of ornamentation, emphasis now being laid on inlay rather than on carving. The development of the engrailed arch (9-cusped) in Shahjehanian architecture was mainly responsible for the disappearance of the fringe of lotus-buds which had thus been rendered superfluous.

The padmakośa or sheath of lotus-petals is the most important form of the use of lotus in Mughal architecture. It has been used almost universally over the domes and cupolas of the chhatris. As a matter of fact, the Mughal finial rises from the centre of an overflowing padmakośa from the apex of any spherical superstructure and the padmakośa marvellously combines the delicate and slender finial, composed of kalaśa and other constituents, with the solid mass of the dome or the cupola as an intermediary element and it is in this exquisite setting that the Mughal finial beautifully reposes. This was an effective architectural formula which was employed in Mughal art from Akbar to Shah Jehan as a general rule, with universally increasing emphasis on its development, so much so that during the age of Shah Jehan the padmakośa crowns the dome prominently at the base of the imposing finial (Plate VII & VIII).

The padmakośa too is an element of ancient Hindu architecture. The so-called bell-capital of ancient Indian art, the Sārnāth example being the most prominent, represented the lotus in an inverted form.[42] In its overflowing representation it is associated with the pūrṇakalaśa motif.[43] This way it was designated the padmakośa (स पद्मकोषः सहसोदतिष्ठत् Bhāgavata

42. E. B. Havell, *The Himalayas in Indian Art* (London, 1924) pp. 11-17; the same motif has been represented at Sāñci, Bhārhut and Kārle. Havell traces the development of the lotus capital as far as to Elephanta. Cf. *Ibid.* pp. 11-19. Also see his *The Ancient and Medieval Architecture of India* (London, 1915) p. 59.

43. V. S. Agarwal, *Chakradhvaja, op. cit.* pp. 24-27.

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3.8.14 etc.).[44] "By its nature it typified Lokapadma, i.e., manifestation of the cosmos as Lotus....in that light the term padmakośa becomes significant for the combined motif of the vase and the lotus."[45] Probably this symbolism of the ancient Hindus was not understood by the dome-builder of Shah Jehan and it was for aesthetic impression that he employed this expedient. Without doubt, he borrowed the idea of surmounting his domes so gracefully from the ancient Indian traditions of art and not from any Islamic source. Of course, he developed it to such magnificent heights through an evolutionary process from Akbar to Shah Jehan.[46]

It may be noted that the padmakośa had been used sparsely in the Delhi Sultanate period, and, instead, the āmalaka was universally employed at the base of the finial over the apex of the dome. The case is almost the reverse in Mughal architecture where the āmalaka is not so commonly used and is found only in a few early buildings of red sandstone, mostly over the chhatris. The padmakośa is the universal formula of dome-presentation and it entirely replaces the āmalaka in the white marble mansions of Shah Jehan.

The āmalaka is also a symbolic architectural element of ancient Indian art. Whatever may be the source of its physical inspiration, the fruit of the nymphea,[47] or of the datura alba, or the common fruit of the āṃlā (āṇvlā) (Phyllanthus emblica),

44. *Ibid.* p. 27.

45. *Ibid.* pp. 27-28.

46. E.B. Havell, *The Ancient and Medieval Architecture of India*, *op. cit.* p. 64; he observed, "When the symbolic and structural significance of the Indian 'orders of architecture' is understood it is easy to trace the derivation of medieval forms and combinations, and their later Muhammedan modifications, from their Asokan prototypes, for the tradition remained unbroken throughout the Mogul period and has continued to the present day." V.S. Agarwal, *Chakradhvaja*, *op. cit.* p. 25 also made an important comment in this reference, "In ancient terminology it represented the Nīlotpala, the blue lotus which in medieval times was known as Lilophar. In Islamic architecture it was carved on the top of the dome which the workmen termed as Maujpatta, i.e., the sweeping long leaves with upturned ends. We may take the combined kalaśa-āmalaka motif on the śikhara of the Hindu shrines as a continuation of the ancient maṅgalaghaṭa motif reproduced in a conventionalized form with flutings in place of the leaves."

47. Havell, (Cf. *The Ancient and Medieval Architecture of India*, *op. cit.* pp. 62-63) traces its origin to the fruit of the nymphea; he further defined that "the antithesis of the lotus and water-lily which were always symbols of creation or life was the white trumpet-shaped flower of the deadly datura plant, sacred to Śiva." This is, however, subject to further investigation.

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the motif was borrowed in the Delhi Sultanate period, as also in Mughal architecture, from the indigenous traditions of art. It was a sacred symbol and crowned the Nagara temple. "Above the truncated body of its śikhara it clasps the shaft and is surmounted by the finial (stūpika) with the vase (kalaśa) as its most conspicuous part..... Its function and meaning are twofold; it is the crown of the superstructure, the sheath and a cogged ring around the internal pillar of the temple. As crown, it is the loadstone which locks together the pile of the śikhara; as ring stone or capital it rises above it and is the final clasp of the neck of the pillar itself invisible and having for its sheath the truncated body of the śikhara. Above the crown and rings of the āmalaka there is no competition, only a meeting and concurrence from all directions in the point of the finial; it rises bud shaped or in the likeness of a fruit (mātuluṅga) from the vessel, the amṛtakalaśa (Amarakāraka) which makes immortal because Viśvakarmā made the kalaśa from the different parts (kalā) of each of the gods. ....The āmalaka effects and symbolizes the passage to heaven; it is the architectural symbol of the celestial world; viewed as sculpture it is a three-dimensional shape of the filaments of the lotus or of a halo with its rays. The disc of the sun looks like the pericarp of the sky-lotus of which the petals are the directions of the compass and the filaments of the solar rays."[48]

It may be noted in this connection that originally the āmalaka, as also the lotus in the form of padmakośa, was employed as an architectural element on the capital of pillars, e.g., at Bedsa, Karle, Nasik and Ajanta. Crowning the shaft it was generally associated with the lotus and kalaśa. "The lotus as well as the pot are inverted, they are seen from above downwards, their petals and contents are showered from a celestial world to the earth below. Indian pillars of later ages from the Gupta period onward retain the āmalaka without or within its casket as constituent part of their capitals. These have many variations and elaborations but as a rule consist of the capital proper called Bharaṇa 'bearing'—on many types of pillars it has the shape of an āmalaka—and a kind of bracket

48. Stella Kramrisch, *The Hindu Temple*, (Calcutta, 1946) Vol I, pp. 348-51.

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capital, called Śirṣa or Head."[49] Later, it crowned the śikhara of the Hindu temple and thence with the same crowning emphasis it was borrowed in the medieval art as a beautiful surmounting feature of a hemispherical superstructure.

Reference may also be made to the lotus-pinnacles which are used so impressively in the white marble buildings of Shah Jehan, e.g., at the Nagina Masjid of Agra Fort, the Moti Masjid of the Red Fort, Delhi and the Taj Mahal, on the superstructure along with the chhatris and domes. They rise from the parapet and the angles and beautifully flank the domes. They help wonderfully to make up the impression of the skyline. Though they were used in the red sandstone buildings of Akbar, as for example on the western wall of the Jami Masjid of Fatehpur Sikri and the facade of the Buland Darwaza to crown the nook-shafts in either case, their use is sparse and casual and does not form part of the plan. Their employment for a marvellous architectonic effect can systematically be traced from the beginning of the age of Shah Jehan when purely ornamental schemes were given up in preference to the architectural elements, so much so that in some buildings of Shah Jehan, e.g., the Moti Masjid of Agra Fort, there is no decoration whatsoever. It was the rhythmic combination of various parts of the structure which brought about the aesthetic effect. Such features as lotus-pinnacles were also utilised by the architect of Shah Jehan with a view to giving harmony and rhythm to the superstructure, which always played a dominant role in his creation, with a grace and splendour which was hitherto unknown.

The lotus-pinnacle is composed of a shaft and a flowering lotus at its crown with a slender finial, preferably a kalaśa finial, rising from its centre. It could have derived its inspiration from the seed of the white lotus or from the flower of the datura alba. It is also possible that the Kanghi flower (Abutilon Indicum) which grows naturally in this region in abundance inspired the form of the lotus pinnacle. The overflowing petals of the pinnacle, however, so closely resemble the conventional padmakośa of the Mughals that the former seem to have been worked out on the outlines of the latter.

49. *Ibid.* p. 353.

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There was no symbolism in view and the feature, as it were, was devised and employed as an ornamental expedient pure and simple. This was characteristically a Mughal formula of art.

(c) *Gavākṣa and Kīrtimukha*

The gavākṣa motif was used in the buildings of Akbar on a large scale, chiefly on the bases of the pillars and pilasters. They appear in the Jami Masjid of Fatehpur Sikri built in 1571 in a variety of ornamental forms (Plate IX). The wings of this mosque have a pillared construction. The huge columns have beautiful brackets and bracket-capitals on which the trabeate ceilings are supported. Traditional motifs like the lotus were freely employed along with the geometrical and conventionalized designs with a balance which is wonderfully maintained to impress the eye aesthetically. The gavākṣa, in a variety of carved forms, with different flows and themes, mainly occupies the bases of these columns.[50] On the pilasters where it is associated with a horizontal band of repetitive lotus or palmette, it is presented as a wonderful ornamental motif of the scheme.

It is likewise used mostly on the bases of pilasters in the so-called Birbal's Palace in an extremely ornamental form in each case.[51] Here it is composed differently. While the outlines of the gavākṣa have been essentially retained, it is associated with a flowing conventional design containing a half-lotus inside it (Plate X). The beautiful semi-circular form appears to support the vertical of the pilaster excellently. In a few cases an extra gavākṣa carved in between the two of the pilaster-bases beautifully counterbalances the plain blank mural surface between the pilasters (Plate XI). The compositional theme of the design as a whole in incised relief technique has been marvellously worked out.

The motif was used freely on the bases of the pillars and pilasters of the Khwabgah and the Sultana's House.[52] The

50. E.W. Smith, *op. cit.* Part IV, Plate XLV and LII. Inverted gavākṣa has also been used, e.g., Plate LVII and LVIII *Ibid.*

51. *Ibid.* Part II, Plate XVIII, XIX, XX, XXVIII, XXXI, and XXXVI.

52. *Ibid.* Part I, Plate XVII and XXII respectively.

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first floor pillars of the Panch-Mahal have a wide variety of the gavākṣa.[53] In a number of cases it has also been used on capitals and sometimes even on shafts but it is mostly, and conventionally, presented on the bases.

The bases of the pilasters flanking the entrance to the cenotaph-chamber of Salim Chishti's Tomb have the gavākṣa motif, though here it has been suitably adjusted according to the plain vertical of the pilaster. It is not the palmette on the pillars and pilasters of the porch; here too the gavākṣa has been depicted in an ornamental form. It is not associated with the lotus or a conventional design but a mane reminiscent of the traditional Kīrtimukha of the Hindu art[54] (Plate XII). The Kīrtimukha motif has actually been used in its essential form, with the unmistakable nose and eyes, on the brackets below the chhajja of Mariam's House (Plate XIII). Here it is presented in a series, each without the gavākṣa.

The gavākṣa was also used prominently at the Jehangiri Mahal of Agra Fort, similarly, on the bases of pillars, pilasters and piers, carved likewise in various ornamental forms in red sandstone. A few beautiful examples come from the pillars of the Mayūra-maṇḍapa and the terrace pavilions. The second, third, fourth and fifth storey columns of Akbar's tomb at Sikandara (1605-12) too have the gavākṣa depicted tastefully on their bases.

As no example of the use of the gavākṣa at the tomb of Itmad-ud-Daulah is met with in any form, it may be concluded that this motif was popularly used in carved forms, on pillars, pilasters and piers in the red sandstone buildings of Akbar and its use discontinued as soon as white marble replaced red sandstone and consequently ornamental themes were changed. Inlay was substituted for carving. Equally important is the fact that constructional technique became mainly accurate, and the employment of pillars was minimal. Even when pillars were used, e.g., at the Diwan-i-Khas of Shah Jehan at the Agra Fort it is not the gavākṣa which is favoured but an ornamental design which is inspired obviously by the engrailed (cusped) arch which was so much in fashion at the time. It

53. *Ibid.* e.g., Plate-LXII.
54. *Ibid.* Part III, Plate-XXVI. It almost gives an impression of fierce-looking Siṃhamukha.

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is not carved but pleasingly inlaid. It contains a pūrṇa-kalaśa with foliage instead of the half-lotus of Birbal's Palace.

It was Akbar's liberal attitude which gave his Hindu artisans the utmost freedom of action and, without doubt, it was through them that the gavākṣa motif, essentially a Hindu symbol allied as it is with the Kīrtimukha, appeared at Fatehpur Sikri and Agra Fort and then as the last vestiges at the Tomb of Akbar which he had himself commissioned for building. It is not certain whether the symbolism of this motif was known to the builders, or whether the artisans carved it (traditionally) simply for the sake of aesthetic impression. Certain it is, however, that it was mostly used on the bases of the columns, in strict adherence to the Hindu practice according to which it was depicted on certain levels of the plinth of the temple and on sills in regular series. This leads one to understand that if not its symbolism, at least its auspicious character was always in the mind of the builders, over and above its compositional theme, which was of course ornamental.

The gavākṣa was wrongly and badly designated as the 'Horse-shoe' by Fergusson and the term was used by later historians almost generally.[55] Originally a semi-circular opening of a thatched bamboo hut, it assumed a symbolic significance during the millennium beginning from the Mauryan age. When used in the rock-cut Buddhist cave, in the form of a semi-circular opening in the facade, it was functional inasmuch as the sun's rays passed into the interior through it. It was thus a Sun-window and being in the shape of eye or curve, it was, justifiably, designated gavākṣa (or eye of the cow).[56] It was used for the same function in the Hindu temple until, through constant use and repetitions it became a graceful ornamental motif (Fig. 3). "Repeated in its reverse function

55. Such ugly and unhistorical terms were largely coined by the British scholars. V. A. Smith called a repetitive lotus-petal design 'Lamb's tongue'; Fergusson even designated an architectural style as 'Bastard'. They have no bearing on the subject and sometimes no connection with the meaning which is intended to be represented and are entirely arbitrary.

56. 'Sun-Window' is its correct name as "it admits the light of the sun which reaches the Chaitya or Stūpa at the far end of the hall" Cf. Stella Kramrisch, *The Hindu Temple*, *op.cit.* p.319 fn. 54. It is also known with slight variations as 'Chaitya-window', 'gable', 'Keel', 'Nāśikā', Sukanāsā, 'Kudū', etc. Its earliest architectural form is preserved in these rock-cut Buddhist caves.

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as a unit of form the gavākṣa became a lace-like pattern of indefinite extensiveness made to fit any shape to which it was applied."[57]

The 'Kīrtimukha' or the Face of Glory crowns the apex of the gavākṣa. It is the symbolic manifestation of the terrible aspect of Śiva,[58] according to Purāṇic mythology. Jalandhara the demon-king acquired great powers and having unseated the gods, challenged Śiva himself. He sent his messenger Rāhu and demanded the surrender of the beautiful Pārvatī. Rāhu had drunk 'Amṛta' and was immortal. God Śiva was enraged at the humiliating demand and opened his third eye from which flew "a terrific burst of power, which explosion immediately took the physical shape of a horrendous, lion-headed demon."[59] With monstrous strength and insatiable hunger, roaring and thundering, he rushed at Rāhu who aghast, took refuge in the god himself. This created a difficult situation as the God immediately bade the monster spare the petitioner. Scorched by a painful hunger he asked the God to assign some victim to feed upon and in his helplessness, Śiva commanded him to feed on its own feet and hands. "Forthwith, to this incredible banquet that incredible incarnation of blind voraciousness proceeded. Ravished by its congenital hunger it ate and ate. And having devoured not only its feet and hands, but its arms and legs as well, it was still unable to stop. The teeth went on through its own belly and chest and neck, until only the face remained. ...Embodied in that monster was the wrath of the Supreme Being, the destructive power of the Universal God, who....periodically annihilates the created universe, the wrath and hunger of the cosmic fire that, at the world's end, reduces everything to ash and then

57. *Ibid.* p. 241. "The shape of this window is derived from the curves of light bending wood, such as bamboo or branches. The outer arch results from two branches being fixed at the bottom and their heads tied together at the top; and end piece of the arch marking the place of the conjoint ends of the branches; .....from about 500 A.D. onwards the ends of each of the two branches forming the arch, curl up in scrolls, to the right and left of the central extension (Ajanta) which frequently carries a lotus flower.....the Kīrtimukha is the general finial of the gavākṣa in the 10th century, in north and south India but is established there also on earlier monument," Cf. *Ibid.* p. 319 and fn. 51.

58. Heinrich Zimmer, *Myths and Symbols in Indian Art and Civilization* (ed. Joseph Campbell) (New York, 1962) p. 139.

59. *Ibid.* p. 180.

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itself is quenched by torrential rain. Hence the fantastic spectacle was a dear sight to the god, and one with which he was in essential agreement. ....He watched silently but with supreme delight, the bloodcurdling, nightmarish procedure, and then, gratified by the vivid manifestation of the self-consuming power of his own substance, he smiled upon that creature of his wrath—which had reduced its own body, joint by joint, to the nothingness of only a face—and benignantly declared : 'You will be known henceforth as 'Face of Glory' (Kīrtimukha) and I ordain that you shall abide forever at my door. Whoever neglects to worship you shall never win my grace'."[60]

Thus the monstrous face was depicted symbolically at Śiva temples, originally on the lintels. Its use as an auspicious device to ward off evil became common and it was incorporated into decorative designs. Combined with the makara it was used on a large scale on the lower parts of the temple, inevitably on the threshold of the main entrance[61] of the Hindu temple, whether Śaiva or Vaiṣṇava, from the tenth century A.D. onwards.

The gavākṣa was combined with Kīrtimukha in the early Buddhist caitya-halls where they are mainly functional. It was used as a repetitive motif at Ajanta for the first time. In its caitya-halls it is used in a series along with vaulted roofs showing faces of gandharvas (celestial inmates)[62] hence its local designation 'Gandharva-mukhas'. Later it became a

60. Zimmer, *op. cit.* p. 181. Kramrisch recounts a similar story and quotes Varāhamihira's Bṛhatsaṃhiṭā (V.1-3) Cf. *op. cit.* p. 325. She holds that Kīrtimukha also represents 'Kāla' (Time). V. S. Agarwal quotes from Padma Purāṇa, Uttarakhaṇḍa Ch. 11 and shows that Kīrtimukha was associated with Śiva as his gaṇa and the motif became part of Śiva's iconography, Cf. *Studies in Indian Art*, p. 239. His view that Kīrtimukha was the caitya-window itself (Cf. *Indian Art*, *op. cit.* p. 187 and *Studies in Indian Art*, *op. cit.* p. 236) is not tenable; it was not the mukha. The window itself was called 'gavākṣa'. Kīrtimukha has its equivalent in Chinese Tao 'Tieh' (The Devourer) Cf. Kramrisch, *op. cit.* p. 323. Mythical makara and haṃsa also belong to the imagery of the Kīrtimukha, *Ibid.* p. 147 fn. 46.

61. "Kīrtimukha serves primarily as an apotropaic demon-mask, a gruesome, awe-inspiring guardian of the threshold," Cf. Zimmer, *op. cit.* p. 182.

62. Heinrich Zimmer, *The Art of Indian Asia*, (ed. Joseph Campbell) (New York, 1960) Vol. I, pp. 248-49. Such gandharva-mukhas have also been used in South India, e.g., in the rock-cut shrines of Māmallapuram and also in the Durgā temple at Aihole.

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decorative motif pure and simple. In the Gupta period the gavākṣa contained a human face[63] and some fine examples come from the Bagh Cave No. 4.[64] It is also made up of the face of the lion in a number of cases and has been designated on this count as Panch-Vaktṛa.[65] "According to the Mānasāra, the front portion of the doorway (mukha-bhadra) was to be decorated with the design of a gavākṣa, a circular motif enclosing the figures of a deva, bhūta, vyāla, siṃha, haṃsa, etc.—and adorned by plants or creepers of foliated pattern and this was beautified on the top by a projecting kīrtivaktra or kīrtimukha design... This kīrtivaktra became a favourite motif in Gupta art and dozens of sculptures are preserved in the Sārnath Museum illustrating this ornamental design."[66] The gavākṣa decoration became formalised as a temple ornament by the tenth century A.D. and was used freely thereafter. It was this formula of indigenous art which inspired its depiction in a variety of ornamental forms on the bases of pillars and pilasters in the early phases of Mughal architecture.

(d) *Svastika*

The Svastika represents the fourfold aspect of the cosmos. "The whole cosmos is based on the principle of quadruplication (चतुष्टयम् वा इदं सर्वम्). There is differentiation of types but it retains the basic unity."[67] The Hindus believed, from the earliest times, that creation is in the pattern of a svastika which is the former's fourfold manifestation, with four arms spreading in the four directions.[68] It was a solar symbol, its symbolical meaning indicating "the path of the Sun across the heavens, and the propitious direction for the priest or pious pilgrim to circumambulate."[69] This could have been a common art-motif of a West-Asiatic heritage as

63. V.S. Agarwal, *Studies in Indian Art*, p. 236.
64. Sir John Marshall, *The Bagh Caves* (London, 1927) p. 13, Plate-VIII Fig (a). Cave XIX of Ajanta has female faces in gavākṣa.
65. For example by V.S. Agarwal, *Studies in Indian Art*, *op. cit.* p. 235.
66. *Ibid.* pp. 236, 238.
67. V.S. Agarwal, *Chakradhvaja*, *op. cit.* p. 41.
68. V.S. Agarwal, *Indian Art*, *op. cit.* p. 49; also see his *Studies in Indian Art*, p. 42.
69. E. B. Havell, *The Ancient and Medieval Architecture of India*, *op. cit.* p. 29.

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A. K. Coomaraswamy held,[70] but its symbolism as a dynamic pattern representing the four-fold aspect of creation appears to be exclusively an Indian conception.

It was used as an auspicious symbol in Indian art, e.g., in the Mathura sculpture (Fig. 4), though, truly speaking, it never became a decorative motif and is rarely used for aesthetic impression. In Mughal art, however, the case is just the reverse. It is depicted in the buildings of Akbar at Fatehpur Sikri and Agra as an ornamental motif pure and simple, almost always forming the key of a geometrical design. Beautiful geometrical patterns in incised carving on stone formed with the svastika as key come from Birbal's Palace.[71] It has also been used there in flowing designs on interior brackets.[72] The dados of the Sultana's House have svastika-patterns around their borders beautifully enclosing the naturalistic vegetational composition of the dado.[73] Not only in carved stone, the svastika forms the key of many an exquisite geometrical design in stucco art and the finest specimens are met with at the Large Baths. A few struts of Salim Chishti's tomb have a graceful geometrical design, again with the svastika as the key motif. As a matter of fact, svastika-based geometrical designs were used at Fatehpur Sikri on a very

70. Cf. *History of Indian and Indonesian Art, op. cit.* pp. 11-14 : "a great variety of motifs found in Mauryan, Śuṅga and early Āndhra art..... present a Western Asiatic appearance, suggesting parallels in Sumerian, Hittite, Assyrian, Mykenean, Cretan, Trojan, Lykian, Phoenician, Achaemenid and Scythian cultures. A partial list of such motifs would include... palmette and honeysuckle (blue lotus) rosette and petal-moulding (rose-lotus), acanthus, reel and bead, lotus or 'bell' (so-called 'Persepolitan') capital.....These and others such as fret, spiral, volute, labyrinth and svastika have survived in folk art upto modern times...*The forms being cognate in West and East*.....India in centuries and perhaps millenniums B.C. was an integral part of an 'Ancient East' that extended from the Mediterranean to the Ganges Valley. In this ancient world there prevailed a common type of culture which may well have had a continuous history extending upwards from the stone age. Some of its most widely distributed decorative, or more accurately speaking, symbolic motifs, such as the spiral and svastika with certain phases of its Mythology, such as the cults of Sun and Fire, may go back to that remote past; more sophisticated motifs and technical discoveries may have originated in any part of the area; a majority perhaps in southern Mesopotamia, others in India or in Egypt."

71. E.W. Smith, Part II, Plate-LIII, LVI.

72. *Ibid.* Plate-XVIII and XIX.

73. *Ibid.* Part I, Plate-XLII.

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large scale in incised carved stone, jalies and stucco.[74] The very composition of the motif, opening in four directions gives it a unique dynamism and facilitates the evolution of a wide variety of geometrical designs with the repeated svastika as the key. A myriad of patterns can be worked out with its help and, as is obvious, it was this adaptability of the motif to repetitions in four directions in a geometrical pattern, rather than its symbolism, that was in the mind of the builders of Akbar. As a matter of fact, it is never used symbolically at Fatehpur Sikri, but always as an ornamental motif. We meet with a similar use of the svastika, i.e., in a geometrical ornament, even in typically Islamic art in Iran and Spain. The circular tomb at Maragha in Iran (built in A.D. 1167-68) has beautiful patterns formed of alternating svastikas on the panels around the entrance arch.[75] Like-wise, the jali pattern at Cordova in Spain is composed of repeated svastikas.[76] Here there was no symbolism whatsoever in view and the motif was used only ornamentally. Aesthetic appeal is universal and the svastika could be used as a decorative device as successfully in Iran and Spain as in India.

The case at Agra Fort is similar. It appears on a border design in stucco in the Eastern chambers of the Jehangiri Mahal. It is also used on a large scale in incised carving on stone piers, again in repetitive geometrical designs in this palace. A few jali-designs have been formed at the fifth storey of Akbar's Tomb at Sikandara. They are not so graceful as are the geometrical designs of the struts of Salim Chishti's Tomb at Fatehpur Sikri which almost resemble the best ivory work. The geometrical design of straight lines with the svastika as its key is, however, more emphatically presented in a jali than on a carved mural surface.

Four svastikas were used prominently on either facade of the main gateway of Akbar's tomb at Sikandara (Plate XIV). They are done in mosaic of different coloured stones. They

74. The geometrical designs of the Mughals have been discussed separately hereinafter.

75. Andre Godard, *The Art of Iran* (tr. Michael Heron) (London, 1965) p. 303, Plate-133.

76. G.T. Rivoira, *Moslem Architecture* (London, 1918) p. 369. Figs. 338, 339.

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are regularly disposed and, instead of forming the key of a geometrical design, they hang boldly on the vertical panels around the portal. Undeniably, they bear an individuality of their own and their exhibition on the facades either way, could have been inspired by the auspicious character of the symbol, which was all along understood by the builders and the people alike. Without doubt, here it is not merely ornamental but is associated with a meaning howsoever meagre in its determination it might have been.

There is no svastika at the Tomb of Itmad-ud-Daulah or in the buildings of Shah Jehan, either symbolic or ornamental. The predominance of the naturalistic, chiefly vegetational motifs on the one hand, and the stylized Persian designs on the other, seems to have been responsible for the total disappearance of some of the traditional art-motifs from the decorative schemes of the Mughal builders after Akbar's tomb at Sikandara (Agra).

(e) *Cakra*

Cakra is the revolving wheel of time. "The wheel (chakra) which later on becomes the mark of a chakravartin, the discus of Vishnu, and the Buddhist Wheel of Law, originally represented the Sun."[77] It is the symbol of the cosmos in its rhythmic or cyclic movement (Chando-gati).[78] "It has a twofold aspect, viz., the centre and the circumference. There is rest at the centre and movement in the circumference, unity in the centre and diversity in the circumference. The complete cakra presents a synthesis or harmony between the two."[79] Its symbolism goes as far back as the Ṛgveda according to which the Ageless Wheel revolves round the heaven of cosmic order.[80] The essential feature of the cakra is cyclic movement (gati) in a rhythmic order. It stands for the Supreme Law of the cosmos and human life. Though originally a Vedic formula, it was adopted by the Buddhists in its fundamental

77. A.K. Coomaraswamy, *History of Indian And Indonesian Art, op. cit.* p. 41.

78. V.S. Agarwal, *Indian Art, op. cit.* pp. 51, 140; also see his *Studies in Indian Art, op. cit.* pp. 6, 42.

79. V.S. Agarwal, *Chakra-hvaja, op. cit.* Preface p. (i).

80. RV. 1.164.11. Cf. *Ibid.* p. (ii).

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meaning and, with them, it became the most prominent religious symbol. They instituted the worship of the Dharmacakra, as they designated it. Cakra worship is abundantly represented on the bas-reliefs of Bhārhut, Sāñci, Bodhgaya, Amaravati, Nāgārjunakoṇḍa and Mathura.[81] The Dharmacakra of the Sārnāth pillar is the most illustrative example of the Buddhists. In Jainism too "a regular worship of the cakra had come from the earliest time and sculptures found from the Kankali Tila Jaina Stūpa (Mathura) bear witness to the deification of the cakra."[82]

Though the cakra motif has also been used for ornamentation in ancient Indian art, mainly in ardha-cakra (half-cakra) form, e.g., at Bagh,[83] Ajanta and Khajuraho, it was essentially a religious symbol and the Hindus do not seem to have popularly adopted it as a decorative motif like the gavākṣa and the lotus. Other motifs which found favour at their hands were the wave, the pūrṇakalaśa and chain-and-bell. As a matter of fact, the ornamentation of the ancient Hindus, Jainas, Buddhists and Brahmanicals alike, largely consisted of animate objects, kinnaras and gandharvas, surasundaris and chauri-bearers, tree-nymphs and other female figures, mithunas and animals like hastin, garuḍa and makara, and in comparison purely symbolic motifs for ornamentation were not used so frequently, abundantly or effectively as the former. They play a subsidiary role in temple ornamentation and were employed either to provide variance to reinforce the aesthetic impression or with a view to their auspicious character.

The cakra was also used, though on a very small scale, in Mughal architecture, chiefly in circular medallions on the capitals of pillars or on spandrels of the arches. A few illustrative examples of the former category come from Birbal's Palace at Fatehpur Sikri[84] and the Panch-Mahal (Plate XV). It was used for mural ornamentation along with carved designs on the eastern facade of the Jehangiri-Mahal in Agra Fort.

81. See for example Figs. 21, 41, 42 (Bhārhut), 25 to 29 and 43 to 46 (Sāñci), 36 (Amarāvati), 48 (Nāgārjunakoṇḍa) and 52 (Mathura), Cf. *Chakradhvaja, op. cit.*

82. *Ibid.* p. 13.

83. See for example Sir John Marshall, *The Bagh Caves* (London, 1927) Plate-III, Fig. I.

84. E. W. Smith, Part II, Plate-XIX and XXX.

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The spokes are so skilfully carved as to suggest movement and, certainly, the indigenous carvers who were employed by Akbar on these palaces, had not forgotten how to represent the symbol correctly in stone so as to be faithful to its traditional meaning. Specimens of the latter are most prominent at the Tomb of Akbar at Sikandara (Agra) where they appear on the spandrels of the second, third, fourth and fifth storey arches, sometimes with the Arabic word 'Allah' carved inside it. It is without doubt a cakra, so easily distinguishable from the lotus. Thereafter, its use discontinued, and it does not form a motif of the ornamental schemes, either at the tomb of Itmad-ud-Daulah or in the marble buildings of Shah Jehan and is entirely replaced even at its privileged position by a full-blown lotus in high relief.

It may be noted, justifiably, that the use of the cakra in the red sandstone part of Mughal architecture was not so much inspired by its symbolic or auspicious meaning as by its ornamental representation, pure and simple. No doubt, the traditional builder understood the motif well in its widest implications, but probably the need to depict its symbolism was not felt, as already there were other symbols available at hand which had wider aesthetic appeal and greater intellectual approbation. This accounts for its disappearance from the later phases of the Mughal art.

(f) *Śrīvatsa*

Śrīvatsa is counted among the eight auspicious signs of classical Indian art[85]. It is deemed to be peculiar to Viṣṇu along with Vaijayantī,[86] which too is an auspicious symbol. But the use of Śrīvatsa was not limited to the Brahmanical iconography; it has also been used on the chest of the Buddha and some of the Jaina Tīrthaṅkaras. It is represented "by a flower of four petals arranged in the form of a rhombus, or by a simple equilateral triangle."[87] The motif was later adopted for

85. V.S. Agarwal, *Indian Art*, *op. cit.* p. 159.

86. T.A. Gopinatha Rao, *Elements of Hindu Iconography*, Vol. I, Part I, (Delhi, 1968) p. 25, "Śrīvatsa is a mark, a sort of mole, which is conceived to adorn the chest of Viṣṇu in association with the Kaustubhamaṇi which is a jewel."

87. *Ibid.* p. 25.

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architectural ornamentation and was used alternated with the lotus on the lintels and friezes of the Hindu temple. Some of the finest examples of its ornamental use come from the temples of Khajuraho.

The śrīvatsa is depicted on the lintels of the doorways of the Akbari-Mahal at Agra Fort. Here it has been combined with the lotus. The upper pavilions of the Jehangiri-Mahal have the śrīvatsa motif carved in bold relief in the interior niches on the entablat ure. It is a popular ornament in some of the early palaces of Fatehpur Sikri. Some of the finest examples come from the so-called Jodhbāi's Palace. The central pavilion of the Western wing which is traditionally known as the temple has this ornament profusely carved on the shafts of columns, on lintels, cornices and friezes.[88] It provides a beautiful ornament in incised (low relief) carving on the shaft of the curvilinear column (Plate XVI). Its use, however, is limited to the upper portions, e.g., lintels and friezes or shafts of columns and there is little doubt that, if not the symbolism of the ancient Hindus, at least its auspicious character was kept in view by the builders of Fatehpur Sikri. This is essentially a Hindu formula of art which, like the other traditional ornamental motifs of the classical order, originated in the religion-oriented concept of all arts being bhadrakṛta.

The śrīvatsa was not used liberally at the tomb of Akbar at Sikandara and the specimens are rare. It dwindled at the tomb of Itmad-ud-Daulah and is completely absent in the buildings of Shah Jehan. Obviously the norms of art changed and with the accession of Jehangir the emphasis was not so much on the symbolism or the auspicious nature of an ornamental motif, as on its aesthetic effect. It may be noted that with Jehangir there was ushered in an era of innovations, and Mughal art, emancipating itself from the traditional depictions, as it were, became essentially secular.

(g) *The Chain-and-Bell Motif*

The chain-and-bell motif, a characteristic ornament of the Hindu temple, is used in three monuments of Fatehpur Sikri. It is depicted earliest at the Stone-cutter's Mosque on its interior columns. Then it appears, on a large scale, on the shafts of

88. See for example E.W. Smith, *op. cit.* Part II, Plate-LXXXVIII and LXXII.

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the columns of the so-called Jodhbāi's Palace[89] (Plate XVII) in exactly the same style as was used in the temples of Gujarat, and, as it seems, the motif came to Fatehpur Sikri with the temple builders of Gujarat who were liberally patronised by Akbar. A pillar on the first floor of the Panch-Mahal also has a chain-and-bell, carved on its shaft.[90] The motif, so typically Hindu as to suggest the sounding of the bell to invoke the deity-incarnate of the Hindu temple, and so antagonistic to the Islamic creed, does not appear in Mughal architecture anywhere else after Fatehpur Sikri. Its use by Akbar at his auspicious capital, and the prospective metropolis as it were, also gives an understanding of his generous attitude to the artistic norms of Hindus.

(h) *Ṣaṭkoṇa*

The most important in this series of symbolic motifs is the ṣaṭkoṇa which is depicted in the early Mughal buildings with a bindu in the centre, or a lotus inside it. It is used earliest, though in a different form, on the mihrab of the Jamali-Kamali Masjid at Qutub at Delhi (dated A.D. 1528). Then it appears on the western gateway of the old Fort Delhi on the spandrels of the arches and in a similar manner on the mihrabs of the Qila-i-Kuhna Masjid and on all the facades of the Sher-Mandal inside this Fort (1530-45).[91]

This was used first in Mughal architecture at the Tomb of Humayun at Delhi built about A.D. 1565 during Akbar's reign. The spandrels of the portal of the main-gate have the ṣaṭkoṇa, one each, with the lotus inside it in bold relief (Plate XVIII). It was used similarly in the spandrels of all the facades of the main building (Plate XIX & XX). It appears next on the Delhi Gate of Agra Fort about 1569. Here it is single in the centre of the gate at the apex of the archway on either side. It was used in the Jami Masjid of Fatehpur Sikri in the north aisle about 1571-72. There it occupies a prominent position above the main mihrab over the sacred inscription from the Quran[92] (Plate XXI). A lotus is carved inside it.

89. *Ibid.* Plate-LXVI and LXXII.

90. E. W. Smith, Part I, Plate-LXV.

91. These early examples of Delhi have not been defined and are subject to intensive investigation.

92. E.W. Smith, *op. cit.* Part IV, p.11, Plate-LI.

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The ṣaṭkoṇa was also used in other monuments of Fatehpur Sikri. One is carved in a circle on a pilaster in Birbal's Palace.[93] It was again used, one in each of the spandrels of the main-gate of Jodhbāi's Palace[94] (Plate XXII). Here too it contains a lotus flower inside it. These two ṣaṭkoṇas overhang the portal prominently and assertively and proclaim something more than the mere artistic effect that is commonly understood.

Most surprising is the ṣaṭkoṇa which is found carved on a strut on the west side of Salim Chisti's Tomb. It is formed of six interlacing serpents which intricately combine around a central bindu (point) like a nāga-pāśa[95] (Plate XXIII). The coils and curves of the serpents have been wonderfully done and the motif seems to have been produced by a skilful artist who was intimately acquainted with it.

The western porch of the Jehangiri-Mahal of Agra Fort (Plate XXIVa) has three, instead of the usual two, ṣaṭkoṇas, one above the window and two on the sides. Here too, a bindu occupies the centre instead of the lotus (Plate XXIV b). The eastern porch of this palace of Akbar (and not of Jehangir as its nomenclature erroneously suggests) also has ṣaṭkoṇas in the spandrels of the arches.

The motif next occurs at the Tomb of Akbar (1605-12) at Sikandara (Agra) on the spandrels of the arches in the 3rd and 4th storey. It is sometimes with the lotus, sometimes without. In a number of cases a dancing peacock occupies the interior space of the hexagonal motif (Plate XXV). It may be remembered that the original plan and design of construction and ornamentation of this tomb which Akbar himself had finalised was little altered by Jehangir. The monument thus belongs heart and soul to the former's style.[96]

What was the purpose of its depiction in the monuments of Akbar? Was it an artistic expedient, pure and simple, like numerous other geometrical motifs, or did it carry some sort of symbolism and a meaning with it? The six-pointed star in

93. E.W. Smith, Part II, Plate-XXX and LV.
94. *Ibid.* Plate LXI and LXII.
95. E.W. Smith, Part III, Plate-XXVIII and XXIII.
96. The ṣaṭkoṇa has also been used at the Tomb of Abdur-Rahim Khan-i-Khanan at Delhi on the spandrels of its portals on each facade about 1626 A.D.

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the interior spandrels of the tomb of Rukn-i-Alam at Multan, belonging to the fourteenth century, has been designated as the Star of David.[97] It was a familiar device in Ghaznavide woodwork. A more illustrative example is the star on the Ghazni-gate (belonging to the tomb of Mahmud of Ghazni, d. 1030 A.D.) now stored in the Agra Fort and erroneously known as the Somanātha Gate. It is beyond doubt a six-pointed star, purely ornamental in its conception and formation (Plate XXVI). The ṣaṭkoṇa of the monuments of Akbar contains either a bindu or a lotus inside it and, with a different form and fabric, it cannot be identified with the so-called Star of David or Solomon's Seal.[98] It occupies a prominent and suggestive position generally on the entrance gateways and obviously something more than a mere artistic representation is associated with it.

The ṣaṭkoṇa of Salim Chishti's Tomb, particularly formed of six serpents, indicates that it has significance in Mughal art. Rather than a motif of some foreign inspiration, it appears to be the ṣaṭkoṇa of the Anāhatacakra of Tāntric symbolism. The serpent is a symbol of life-enregy in Indian art[99] and its depiction in a well-knit formula can only be associated with the Indian order which is its most practical exponent.

The Yogins believe that there are six cakras (ṣaṭcakras), also known as Lotuses, in the human body in an ascending order (Plate XXVII), viz.,

(1) Mūlādhāra —at the root of the spine; it presides over Pṛthvī (matter in its gross physical state);

(2) Svādhiṣṭhāna —at the level of the genitals; it presides over Āpas (water);

97. J. B. Page, *Splendours of the East*, p. 81.

98. Similarly it cannot be defined as an auspicious symbol of the Zoroastrians with whom Akbar came into contact at a date later than the construction of these buildings.

99. Nāgas "are keepers of the life-energy that is stored in the early waters of springs, wells and ponds. They are the guardians, also, of the riches of the deep sea-corals, shells and pearls. They are supposed to carry a precious jewel in their heads .... An important function of the Nāgas is that of 'door-guardian' (dvārapāla). As such they frequently appear at the portals of Hindu and Buddhist shrines. In this role their proper attitude is one of pious devotion (bhakti), fervent and loving concentration on the inward vision of the god..." Cf. Heinrich Zimmer, *Myths and Symbols in Indian Art and Civilization*, *op. cit.* p. 63.

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(3) Maṇipūra —at the level of the navel; it presides over Agni (fire);

(4) Anāhata —at the level of the heart; it presides over Vāyu (air);

(5) Viśuddha —at the level of the throat; it presides over Ākāśa (ethereal state of matter);

(6) Ājñā —between the eye-brows; it presides over manas (mind proper).[100]

Finally there is Sahasrāra at the crown of the head; it is the highest centre of the manifestation of consciousness in the body.

They believe that the Divine Śakti, the power which alone can manifest the Brahmānanda, the Kuṇḍalinī, sleeps coiled up like a serpent in the Mulādhāracakra. When awakened by Yoga, it uncoils and ascends higher from cakra to cakra till it reaches the highest point and meets with the Puruṣa or Śiva. This union is Bliss.[101]

This union of Śakti with Śiva is represented by the Tāntrics by Śrīyantra[102] (also called Śrīcakra). In Hindu devotional tradition 'yantra' is a general term for instruments of worship, namely, idols, pictures, or geometrical diagrams.[103] Śrīyantra

100. M.P. Pandit, *Lights on the Tantra* (Madras, 1963) pp. 14-15.

101. *Ibid.* p. 16; Pandit also quotes Sri Aurobindo for elaboration, "the whole energy of the soul is not at play in the physical body and life, the secret powers of mind, are not awake in it, the bodily and nervous energies predominate. But all the while the supreme energy is there, asleep; it is said to be coiled up and slumbering like a snake—therefore it is called the Kuṇḍalinī Śakti—in the lowest of the cakras, in the Mulādhāra. When.....this Kuṇḍalinī is struck and awakened it uncoils itself and begins to rise upwards—like a fiery serpent breaking open each lotus as it ascends until the Śakti meets the Puruṣa in the Brahmarandhra, in a deep samādhi of Union," Cf. *Ibid.* pp. 17-18. T. A. Gopinatha Rao, *Elements of Hindu Iconography*, Vol. I Part II (Delhi, 1968) pp. 328-29. J. N. Banerjea, *The Development of Hindu Iconography*, (Calcutta, 1956) pp. 493-94, "this process of rousing the Kuṇḍalinī Śakti and carrying it to the highest cognitive centre of the human body is known to the Śāktas as Ṣaṭcakrabheda." Also see Arthur Avalon's (Sir John Woodroffe's) *The Serpent Power*, (Ṣaṭcakra-Nirūpaṇa and Pādukā-Pañcaka) (Madras, 1958) pp. 103-164.

102. Heinrich Zimmer, *Myths and Symbols*, *op. cit.* p. 140; "When utilised in connection with the practice of Yoga, the contents of the Yantra diagram represent those stages of consciousness that lead inward from the everyday state of naive 'ignorance' (avidyā) through the degrees of Yoga-experience, to the realization of the Universal Self (Brahman-Ātman)."

103. In Tāntric terminology, a cakra is defined as a figure consisting of angles and petal-like parts; that which consists of angles alone is called a Yantra.

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which is the most important of the Tāntric yantras is composed of the three main elements :

(i) A square outer frame, composed of straight lines broken according to a regular pattern,

(ii) an inclosed arrangement of concentric circles and stylized lotus petals, and,

(iii) a concentric composition of nine interpenetrating triangles. (Fig.5)

There are two sets of triangles, one set composed of four male or Śiva triangles and the other of five female or Śakti triangles. The 11th verse of the Tāntric work '*Ānandalaharī*' thus reads :

चतुर्भिः श्रीकण्ठैः शिवयुवतिभिः पञ्चभिरपि
प्रभिन्नाभिः शंभोर्नवभिरपि मूलप्रकृतिभिः।
त्रयश्चत्वारिंशद्वसुदलकलाश्रत्रिवलय-
त्रिरेखाभिः सार्धं तव भवनकोणाः परिणताः ॥

"The Śrīkaṇṭhas are the four triangles with points upwards. These represent the Śiva-element. The Śivayuvatīs are the five downward pointed triangles which represent the Śakti element. By the Mūlaprakṛti of Śiva who is in the form of Bindu the nine are formed. The three lines and circles are the three outer sections in the Yantra and the lotuses of eight and sixteen petals are the inner ones in the same. This Yantra is the celebrated Śrīyantra or Śrīcakra....."[104]

Thus the Yantra is, in essence, a symbol of the creative activity of the cosmic male and female energies on successive stages of evolution, while the 'bindu' the central point in the interplay of all the triangles represents the Absolute; it mirrors "a dynamism nevertheless exhibited in a static pattern of geometrical repose. This is the archetypal Hieros Gamos or 'Mystical

104. Arthur Avalon (Sir John Woodroffe), *Wave of Bliss*, (Madras 1953) pp. 15-16; Sir John while commenting on '*Kāmakalāvilāsa*' another important Tantric work, again observed that the Supreme Triangle is formed of the Bindu and Visarga, of Prakāśa and Vimarśa, of Śiva and Śakti, of 'I' (Ahaṃ) and 'This' (Idaṃ) or Universe, the supreme sense, the Śivasvarūpa and Śaktisvarūpa ; it is a representation of the evolution of the one in its twin aspect as changeless consciousness (cit or saṃvit) and changing over (cit-śakti and Māyā-śakṭi) into the multiple Universe. Cf. *Kāma-kalā-vilāsa* (Madras, 1953) p. V. Zimmer (Cf. *op. cit.* p. 147) conforms.

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Marriage' represented in an abstract diagram—a key to the secret of the phenomenal mirage of the world."[105]

The Ṣaṭkoṇa was also a diagrammatic representation of Tantric origin. Verse 22 of the Tantric work 'Ṣaṭcakranirūpaṇaṃ' reads :

तस्योर्ध्वे हृदि पंकजं सुललितं बन्धूककान्त्युज्ज्वलं
काद्यैर्द्वादशवर्णकैरुपहितं सिन्दूररागान्वितम् ।
नाम्नानाहतसंज्ञकं सुरतरुं वाञ्छातिरिक्तप्रदं
वायोर्मण्डलमत्र धूमसदृशं षट्कोणशोभान्वितम् ।।

Above the third lotus Maṇipūraka, in the heart is the charming lotus Anāhata of the shining colour of the bandhūka flower with the twelve letters beginning with *ka*, of the colour of vermilion, placed therein. It is known by its name of Anāhata and is like the celestial wishing tree... The Region of Vāyu, beautiful and with six corners (ṣaṭ-koṇa, that is interlacing triangles) which is like unto the smoke in colour is here[106] (Plate XXVIII).

It has been prescribed as a yantra with positive results. Verse 26 of the same work reads :

ध्यायेद्यो हृदि पंकजं सुरतरुं शर्वस्य पीठालयं
देवस्यानिलहीनदीपकलिकाहंसेन संशोभितम् ।
भानोर्मण्डलमण्डितान्तरलसत्किञ्जल्कशोभाधरं
वाचामीश्वर ईश्वरोऽपि जगतां रक्षाविनाशे क्षमः ।।

105. Zimmer, *op. cit.* p. 148. "A symbol of the Universe (both macrocosm and microcosm) and its divine cause" K.R. Venkataramana, 'Śakti Cult in South India', *The Cultural Heritage of India*, Vol. IV (Calcutta, 1956) p. 258.

106. Arthur Avalon (Sir John Woodroffe), *The Serpent Power*, (Madras, 1958) p. 371. It may be remembered that the pañcabhūtas, or the five states of existence, viz., pṛthvī, āpas, tejas, vāyu and ākāśa, standing respectively for solidity, liquidity, radiation, gaseousness and ethereality are differently represented in iconography; thus pṛthvī by a square or cube, āpas by a circle, water or water-born plants and animals, tejas by light stellate figures as of interlacing triangles, vāyu by smoke, smoke colour, a globe or flying bodies and ākāśa or ether by emptiness (śūnya) or heavenly bodies as the sun and moon, Cf. L.A. Ravi Varma, 'Rituals of Worship', *The Cultural Heritage of India*, Vol. IV (Calcutta, 1956) pp. 455-59.

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"He who meditates on this Heart Lotus becomes (like) the Lord of Speech, and (like) Īśvara he is able to protect and destroy the worlds. This Lotus is like the celestial wishing-tree, the abode and seat of Śarva (Śiva). It is beautified by the Haṃsa (Jivātmā) which is like unto the steady tapering flame of a lamp in a windless place. The filaments which surround and adorn its pericarp, illumined by the solar region, charm."[107]

This is the Anāhata or the fourth cakra in the order of the Tantric union of Śakti with Śiva. This is an important stage and the ṣaṭkoṇa, the yantra which represents this cakra with a point or bindu in the centre, has a sound philosophical symbolism. The ṣaṭkoṇa yantra (the double triangle) like the Śrīyantra is a symbol of creation. "Before all things were, there was a point (Punctum : Bindu) not the Atom or mathematical point (which though it is without magnitude has position) but the diffusive (neither with magnitude nor position). In the One (Monas) there was implicitly contained the Many (Myrias). There was Light and Darkness : Beginning and End: Everything and Nothing : Being and Non-Being (that is the state was neither Sat nor Asat).... Infinite consciousness whilst still transcendentally retaining its Svarūpa is, as Śakti, narrowed to the degree which constitutes our experience on the material plane. The process may be represented in Diagram by an inverted triangle representing the Yoni or Śakti, in the form of the Pure Tattvas, resting on the point of an upright triangle. The point of intersection is Māyā from which proceeds the second triangle representing the impure Tattvas, which constitute worldly experience."[108]

Representations of the ṣaṭkoṇa are frequently met with in ancient India.[109] It was commonly used, along with other

107. Arthur Avalon, *op. cit.* p. 379.

108. Cf. *The Garland of Letters* (Madras 1951) pp. 123, 146-47.

109. "The belief in the mystic potency of the interlacing triangle and other geometrical figures, does not belong exclusively to the Hindus. The interlacing triangle which is known to the Freemason under the name of AGLA, once contained cabalistic characters in each of its spaces and was considered to represent either the design of Solomon's seal or the Shield of David. By some strange and occult process of reasoning it was believed to be a security against wounds, to serve as an extinguisher of fires and to possess other marvellous properties. The interlacing triangle, or the pentangle, with the letter G placed in the centre forms the jewel of the

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symbols like the triratna and the svastika on coins before the Kuṣāṇa period.[110] The ṣaṭkoṇa without any diminished symbolical meaning was also used in temples, particularly those which were dedicated to the worship of Śiva and Śakti. Some have been found carved on the walls of the temples at Mandor near Jodhpur.[111] More important in this respect are the discoveries of a few Tantric sculptures of rare value at Bundi near Kota, also in Rajasthan.[112] Besides finding a Śrīyantra (Śrīcakra) of unmistakable Tantric symbolism in a Śiva temple near Nawal Sagar and Nāg-Peca (another Tantric yantra formed by the intricate coils of a serpent) on the ceiling of a Gaṇeśa temple near Mindaka Dara, at Bundi, a ṣaṭkoṇa in the Śiva temple at Kedāreśvar was also discovered at Bundi. There, in the square yoni, or the Vedi of the Śivaliṅga, rests a six-pointed star, formed by two overlapping triangles, within an eight-petalled lotus flower. The Śivaliṅga stands in the equilateral triangle which is carved inside the ṣaṭkoṇa. This representation of the ṣaṭkoṇa, belonging to the thirteenth century, obviously associates this motif with the śaiva worship which was so predominantly based on Tantric symbolism.

Besides the Śaiva and Śākta Tantrics, the followers of many sant-paraṃparās, e.g., the Nātha saṃpradāya, also believed in the Haṭhayoga-sādhanā (Ṣaṭcakra-Siddhi). Their mysterious practices had their due impact on the intellectuals of the age. Kabīr who ranks among the most prominent saints of the Bhakti movement in the medieval age, was a contemporary of Sikandar Lodi (A.D. 1487-1517). He was intimately conversanta with

Mark-Mason; and the same, with an Egyptian TAU in the middle space and with a tail-devouring snake encircling the whole, constitutes the seal of Modern Theosophical Societies." Cf. T.A. Gopinatha Rao, *op. cit.* Vol. I Part II, p. 331 fn. It is, however, difficult to trace any association of the Tantric ṣaṭkoṇa with a foreign motif.

110. A.K. Coomaraswamy, *History of Indian and Indonesian Art*, *op. cit.* p. 45.

111. James Tod, *Annals and Antiquities of Rajasthan*, Vol. II (London, 1920) p. 840; depiction of this and other symbolical motifs led Tod to believe, erroneously, that this was the work of a Buddhist architect. There are no such sectarian divisions in Indian Art. He later rightly understood it to be a Śaivaite symbol. Tod also refers to coins and medals excavated from the ruins of Ujjain and other ancient cities which bore this mystical symbol, Cf. *Ibid.*

112. Cf. The Hindustan Times Weekly Review, September 6, 1970, *Rare Tantric Sculptures*, p. i.

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the ṣaṭcakra-siddhi, of which he speaks in his poetic works over and over again, as a method of realization of Brahmānanda :

नरहरि सहजै ही जिनि जानां ।
गत फल फूल तत तरपल्लव, अंकुर बीज नसानां ।
प्रगट प्रकास ग्यांन गुरगमि थैं, ब्रह्म अगनि पुजारी ।
ससि हरि सूर दूर दूरंतर, लागी जोगजुग तारी ।
उलटे पवन चक्रषट बेधा, मेर-डंड सरपूरा ।
गगन गरजि मन सुनि समानां, बाजे अनहद तूरा ।
सुमति सरीर कबीर विचारो, त्रिकुटी संगम स्वामीं ।
पद आनंद काल थें छूटे, सुखमें सुरति समानीं ।।

(He enumerates the importance of the sahaja-sādhanā of Yoga and describes how the Kuṇḍalinī is awakened and ascends through the Suṣumnā-path. It pierces the Ṣaṭcakra (the six cakras) and reaches the sahasrāra where at the point of Brahma-randhra occurs the anāhatanāda and the Yogin achieves Bliss). And :

सहज सुंनि को नेहरो गगन मण्डल सिरिमौर ।
दोऊ कुल हम आगरी, जो हम झूलै हिंडोल ।।
अरघ उरघ की गंगा जमुनां, मूल कवल को घाट ।
षटचक्र की गागरो, त्रिवेणी संगम बाट ।
नाद ब्यंद की नावरी, राम नाम कनिहार ।
कहैं कबीर गुणं गाइले, गुरु गंमि उतरौ पार ।।

(The state of sahaja is there on śūnya-śikhara. It is samādhi and Blisss is achieved through the ṣaṭcakra-siddhi).

Jāyasī, who wrote his Padmāwat during the reign of Sher Shah (A.D. 1540-45), based his work entirely on the conception of ṣaṭcakra-siddhi, in highly symbolic characters and their actions. In his Singhal-Dvīpa-Khaṇḍa, verse 165, he describes :

सो गढ़ देखु गगन ते ऊंचा । नैनन्ह देखा, कर न पहुंचा ।
बिफुरी चक्र फिरै चहुं फेरी । औ जमकात फिरै जमकेरी ।।

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(He describes symbolically the obstacles which a sādhaka of Yoga meets. The Sahasrāra cakra is higher than the sky. It can only be felt. It cannot be touched. There is vidyut all around and the sword of Yama protects it. Such is the difficult path of this siddhi).

Again in verse 220 of the same Khaṇḍa, he speaks of the Yogic physiology in symbolic terms :

गढ़ तस बांक जसि तोरि काया। पुरुष देखु ओही कै छाया।
पाइय नाहिं जूझ हठि कीन्हें। जेइ पावा तेई आपुहि चीन्हें।
नौ पौरी तेहि गढ़ मझियारा। औ तहं फिरहिं पांच कोटवारा।
दसवं दुवार गुपुत एक ताका। अगम चढ़ाव, बाट सुठि बांका॥
भेदै जाई सोई वह घाटी। जो लहि भेद, चढ़ै होई चांटी॥

(It is very difficult to scale this fort. But once it is achieved, the sādhaka realizes the eternal truth. The human body has nine doors (means śarīrarandhras) which five door-keepers (kāma, krodha, mada, lobha and moha) guard. The tenth door, the Brahma-randhra, is secret. The ascent is difficult and the path is very complicated. One who knows the secret goes up like an ant (for ṣaṭ-cakra-bhedana).

Worship of these Tantric yantras[113] was common in India. Particularly in the South Indian temples of the medieval and later periods the Śakti-pīṭhālayas almost invariably contained the yantras which were in regular worship. There is no doubt, that gradually the devotees lost sight of its symbolic meaning and, reduced to a superstition, pure and simple, and devoid of the philosophy which was responsible for its inception and practice, a yantra became in Medieval India a mystic and magical diagram to ward off evils and to bring in certain results in fulfilment of some cherished desires. This led to a widespread misunderstanding of the Tantric practices which were identified with Kāpālika and other extremist Śākta cults and considered to lead to an accomplishment of Black Magic. Knowledge of the original symbolism was confined to a narrow literary circle and a small band of yogins, tāntrics and saints,

113. T. A. Gopinatha Rao holds that the worship of the yantras did not begin in the post-Gupta period and had a more ancient origin and a reference in this regard has also been found in the Taittirīya Āraṇyaka, Cf. *op. cit.* p. 331.

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who, however, continued to exist despite all political upheavals.

Akbar seems to have been deeply impressed by the occult sciences of the Hindus and the practices which lead to their accomplishment. He had contact with the jogis. A jogi named Devī who was well versed in these sciences was brought to the Imperial citadel, pulled up the wall and, while thus suspended, instructed the Emperor in the secrets of Hindu practices.[114] Badaoni gives a detailed account of the Emperor's association with the jogis and his belief in these practices. With dismay and sarcasm he records :

"His Majesty also called some of the Jogis and gave them at night private interviews, enquiring into abstract truths; their articles of faith; their occupation; the influence of pensiveness; their several practices and usages; the power of being absent from the body; or into alchemy, physiognomy, and the power of omnipresence of the soul. His Majesty even learned alchemy, and showed in public some of the gold made by him. On a fixed night, which came once a year, a great meeting was held of jogis from all parts. This night they call Sivrat. The Emperor ate and drank with the principal Jogis who promised him that he should live three or four times as long as ordinary men. His Majesty fully believed it and connecting their promises with other inferences he had drawn, it became impressed on his mind as indelibly as though it were engraved on a rock. Fawning court doctors, wisely enough, found proofs of the longevity of the Emperor, and said that the cycle of the moon, during which the lives of men are short was drawing to its close, and that the cycle of Saturn was at hand, with which a new cycle of ages, and consequently the original longevity of mankind, would again commence. Thus, they said it was mentioned in some holy books that men used to live up to the age of one thousand years while in some of their own Sanskrit books the age of men was described as ten thousand years; and in Tibet there was even now a class of Lamas, or devotees, and recluses, and hermits of Cathay, who live two hundred

114. Al-Badaoni, *Muntakhabu't-Tawarikh.* Vol. II (tr. W.H. Lowe) (Calcutta, 1924) p. 265; also see M.L. Roychoudhury, *op. cit.* p. 140.

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years and more. For this reason His Majesty, in imitation of the usages of these Lamas, limited the time he spent in the Harem, curtailed his food and drink, but especially abstained from meat. He also showed the hair of the crown of his head, and let the hair at the sides grow, because he believed that the soul of perfect beings, at the time of death, passes out by the crown (which is the tenth opening of the human body) with a noise resembling thunder, which the dying man may look upon as a proof of his happiness and salvation from sin, and as a sign that his soul by metempsychosis will pass into the body of some grand and mighty king."[115]

That the Emperor had faith in 'Black Magic' and he, if not actually followed himself, at least patronised some sort of superstitious practices is borne out by an illustrated manuscript now preserved in the Raza Library, Rampur. It is a collection of amils (talismans) for the cure of diseases or for fulfilment of desires.[116] The miniatures were done by his artists about 1576-80. Such talisman manuscripts were also produced in Persia, "the subject being a branch of the occult science known in Persian as Nairanjāt (magic) or 'Ulume Sirriya' (secret knowledge)"[117] and with the Persian masters in his atelier to guide the work, he too could have it done at his command.

Except for the mysterious effect of the painting that is intended to be represented and accompany it, like a Tantric yantra, each miniature appears to be wholly unintelligible. One shows a man with a black serpent (Plate XXIX). Others show a man with two faces; a man holding the head of an old woman in one hand and a spear in another (Plate XXX); a man resembling a fairy, etc. (Plate XXXI). These paintings well reflect the credence the Emperor attached to the creation of such works which do not have much artistic value.

Much more important from this point of view are some of the frescoes of the painted chambers of Khwabgah and Mariam's House at Fatehpur Sikri (near Agra). There is a curious

115. *Muntakhabu't-Tawarikh*, Vol. II, *op. cit.* pp. 334-35.

116. Karl Khandalavala and Jagdish Mittal, 'An Early Akbari Illustrated Manuscript of Tilasm and Zodiac', *Lalit-Kala*, No. 14 (1969) p. 9.

117. *Ibid.* p. 9.

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painting at Khwabgah which shows mutilated limbs all around.[118] It is wholly unintelligible. Another painting depicts a cave entrance showing a winged fairy supporting a new born baby (Plate XXXII).[119] That it conveys the idea of the birth of Salim at Fatehpur Sikri may well be conjectured. But the interpretation only enhances the volume of mystery in this pictorial representation. There is yet another painting in the same series the meaning or purpose of which has also not been understood.[120] Similarly many paintings at Mariam's House have not been correctly defined. One shows winged angels (Plate XXXIII).[121] No doubt there seems to be some auspiciousness associated with it, but what was the actual meaning of its representation cannot be said for certain. What led Akbar to allow these paintings of mutilated limbs or mysterious angels to be depicted in his residential mansions? These pictures could not have added to the beauty of the palace. Obviously, these pictures served the purpose of amils (talismans) and satisfied the superstitious craze of the age—to which Akbar seems to have liberally subscribed.

There cannot be a better evidence of Akbar's belief in such practices than his own shield, a beautifully damascened item, now preserved in the Prince of Wales Museum of Western India, Bombay.[122] It depicts the 12 signs of the Zodiac (Rāśis) with the name of each rāśi inscribed in a circle over it in Persian letters. In the exact centre is the Sun with eyes and nose, and long moustache and tilak (Hindu mark on forehead). On a corner is depicted a ṣaṭkoṇa (Plate XXXIV) in the centre of which is inscribed—

118. E.W. Smith, Part I, p. 6, Plate-XV (a).
119. *Ibid.* p. 7, Plate-XV (b).
120. *Ibid.* p. 7 Plate-XV (c).
121. *Ibid.* p. 33 Plate-CIX fig. 1; another on Plate-CXI is wholly unintelligible.
122. Item No. 16.100 of the Prince of Wales Museum of Western India, Bombay.

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(Buland Iqbal
Shahenshah Akbar
Sanh 10 2)

(The third digit of the date is missing but it seems to be '0' and as the preceding digit too is '0' the inscriber appears to have omitted it to avoid repetition. Thus it seems to be 1002 A.H.=1594 A.D.).

This personal shield of Akbar unmistakably shows that the Emperor firmly believed in Astronomy (hence the 12 signs of Zodiac) and in the efficacy of the Sun (hence its depiction as the central theme of the shield).[123] The shield is probably the most important item of the personal armour of an Emperor, for it helps to protect his person in a life-and-death struggle, and the depiction of the ṣaṭkoṇa on such a precious item of Akbar's personal armour, incidentally, represents his strong belief in its 'Yantra'.[124] It was believed, it appears, that the depiction of this Tantric symbol would be auspicious to the person of the Emperor, that it would ward off evil and and would protect him from all dangers in battles.

The ṣaṭkoṇa was depicted on the mosque, tomb and residential mansions of Akbar, similarly, out of the superstitious belief that its representation was auspicious and it warded off evil. The original symbolism of the yantra might not have been intended by the builders of these monuments but the fact that it was something supernatural and associated with occultism seems to have been firmly believed by them. That is why they represented this symbol so prominently and assertively mostly on the gateways. The use of this motif well illustrates the spirit of the age to which these buildings belong and reflects some of the popular beliefs of its people. It is interesting to note that though the ṣaṭkoṇa was also used in the monuments of Shah Jehan (e.g., on the ceiling of the Main hall of the Khas Mahal in Agra Fort), it no longer occupies

123. This aspect of Akbar's personality and its imprint on his architecture has been discussed in author's paper 'The Diwan-i-Khas of Fatehpur Sikri : A Symbol of Akbar's Belief in Sūrya-Puruṣa' *Quarterly Review of Historical Studies*, Calcutta, Vol. XII, No. 4.

124. The point that it occupies a particular corner under a particular rāśi is related to the study of Mughal Astronomy and forms the subject of a separate investigation.

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an important position and has been reduced, obviously, merely, to an ornamental motif—like the one used on the Ghazni Gate which has been referred to above. No auspicious character is then assigned to it and the superstition as well as the symbolism has been dropped with the coming of a new age and the setting in of a new trend of art. It was Akbar's liberalism which brought the ṣaṭkoṇa into his monuments; as soon as this viewpoint was given up by the Mughal State, the yantra dwindled, though the six-pointed star continued to be depicted in its ornamental form.

Thus from the point of view of the depiction of symbolic motifs, the Mughal buildings from Akbar to Shah Jehan may be placed in three broad categories :

(i) Red sandstone monuments of Fatehpur Sikri; Akbari-Mahal, Jehangiri-Mahal and the other buildings of Akbar in Agra Fort and the tomb of Akbar at Sikandara (Agra). Some ancient Hindu symbols, e.g., the gavākṣa, śrīvatsa, cakra, kalaśa and ṣaṭkoṇa, are depicted with their symbolism in view but more with an eye to their auspicious character and as architectural ornaments.[125] They are used with the same traditional skill and sometimes occupy prominent spaces in the surface decoration. The svastika is used only as a geometrical motif and not symbolically.

(ii) The tomb of Itmad-ud-Daulah and a few other buildings of the reign of Jehangir have no symbolic motif and the theme is purely ornamental. The designs are mainly geometrical and naturalisitic or stylized florals. Animate designs inspired directly by the contemporary art of painting are also depicted.

(iii) The white marble buildings of Shah Jehan, e.g., his palatial mansions, mosques and the Taj Mahal, have no symbolic depiction of the padma, cakra, śrīvatsa, svastika, ṣaṭkoṇa or any other typically Hindu motif. The kalaśa has been used on the dados merely as an ornament with little symbolism in view, besides its universal employment over the dome as an integral part of the Mughal finial. It may be noted, thus, that originally the motifs were typically Hindu.

125. Vyāla, makara, haṃsa and animate motifs used in these buildings have been discussed separately.

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In the age of Jehangir, the naturalistic florals consisted largely of Iranian motifs such as the cypress and narcissus. Shah Jehan's age is remarkable for the evolution of typically Mughal motifs. Hindu symbols like the pūrṇa-kalaśa on the one hand and Islamic designs like the stalactite on the other were conventionalized and used as artistic expedients. Similarly naturalistic and stylized florals were formalized and employed universally in his buildings as typically Mughal designs—in a wide variety of methods, e.g., carving, jali, inlay, painting and stucco. This is how designs and motifs, indigenous and extraneous, evolved in Mughal art. In a word, it was a development from a religion-oriented traditional superstition to an architectural aestheticism of a secular character.

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Chapter II

THE ABSORPTION OF TYPICALLY ISLAMIC ELEMENTS IN MUGHAL ARCHITECTURE

(a) *The Spirit of Islamic Art*

The medieval architecture of India has been variously described. It is given such misnomers as 'Saracenic', while sometimes it is pointedly, though confusingly, designated as Islamic. Chronologically flourishing for about five centuries in the Sultanate and the Mughal period, and geographically spreading over such a vast country as India, in the central region and the outlying provinces, this architecture is, however, marked by certain characteristics which constitute its form and fabric throughout the period, in the whole of the country. These characteristics are distinctive, inasmuch as they were not in vogue in India prior to their introduction by the Muhammedans about the end of the twelfth century A.D. The radiating arch with voussoirs, the dome, the squinch, the stalactite and certain other features are typically Islamic structural devices in India, Likewise, geometric designs, calligraphic art, the arabesque and some other themes of ornamentation are characteristically Islamic. It would be historically as important as it would be interesting to analyse the various sources of their inspiration and to evaluate their contribution to the evolution of the Mughal style of architecture in which these Islamic features have found their profoundest, and most beautiful, expression.

In its origin, Islamic art is "a simple aggregate of constructional procedures and decorative formulae adapted by Islam from the techniques of the peoples under its domination."[1] The nomad Arabs of Hijaz had neither sculptors, nor artists, nor architects, nor schools of art.[2] Their way of life did not

1. Andre Godard, *The Art of Iran* (Heron & Rogers) (London, 1965) p. 254.
2. K.A.C. Creswell, *Early Muslim Architecture*, Vol. I (Oxford, 1932) p. 154.

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include the practice of arts; "from the artistic point of view there was little to show before Islam, and even if we limit our definition of the word 'art' to its plastic expressions, it is clear that there was no such thing as Bedouin art."[3] "At this time nine-tenths of the population were nomads, for whom the finest architecture is the tent of camel's hair...their architectural resources, before they started on their career of conquest, were barely enough to give the rudest expression to their needs. Arabia constituted an almost perfect architectural vacuum and the term 'Arab' should never be used to designate the architecture of Islam."[4]

The life of the Bedouin Arab is very hard, uncertain and daring. He moves from one place to another along with his herds. He is an individualist. He has indefatigable energy, reckless courage and great patience. His indomitable tenacity "developed in him in his daily fight against hostile nature—the glacial cold of the nights, fatigue, hunger, the suffocating south wind—the wild beasts of the desert and other men. This impassioned resistance, the pre-condition of his liberty, has fashioned him a temperament of steel at once supple and resistant which enables him to live and prosper in a climate where everything except the Bedouin and his camel wilts and is endangered."[5] Islam gave him a discipline and a message which awoke his dormant energies to movement.

The first mosque at Medina consisted of rows of palm trunks used as columns and a thatch of palm leaves and mud. The first mosques at Basra, Kufa and Fustat too were extremely primitive. "For over a generation the Arabs remained quite untouched by any architectural ambitions and showed not the slightest desire to make use of the developed architectural

3. Andre Godard, *op. cit.* pp. 259-60.

4. K.A.C. Creswell, *Early Muslim Architecture* (1958) pp. 15-16; in another reference he noticed, "The researches of the last twenty years have made it abundantly clear that the Arabs brought nothing architectural with them from Arabia but their very simple ritual requirements. Moreover, the armies of primitive Islam were composed of Bedouin, chiefly from the heart of eastern Arabia, knowing Muhammad and the Quran merely by name, who had gathered together, not to take part in a religious war for the propagation of the faith, but in the hope of gratifying their lust for loot...." Cf. *Memoir No. 15 of the A.S.I.* 'The Drawing of Geometric Patterns in Saracenic Art' (Calcutta, 1925) p. 1.

5. Andre Godard, *op. cit.* pp. 258-59.

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talent of the conquered peoples. When they did begin to feel such ambitions, it was chiefly for political reasons."[6]

Early Islamic art was shaped by two influences, viz. Hellenistic in the region of Syria, and Iranian in Iraq and Persia.[7] They converted the Syrian churches on the one hand and the Apadana (hypostyle halls of Persia), on the other, into mosques. With the spread of Islam into farther west and east, "it assumed a great number of local characteristics differing according to the diversities of climate and of materials, the traditions, nature and native art of the various peoples conquered and absorbed by the Arabs."[8] Thus grew the art of Islam in different lands, under different circumstances.[9]

But howsoever diverse were the styles which developed within its fold in various countries, there always was an underlying spirit which connected one with the other irrespective of distance at least upto the end of the seventeenth century. There always was an individuality of its own which helped to identify it with the indigenously developed local art. There always were some common features, both structural and decorative, "across the apparent contradictions of form, style and material, of monuments widely separated in time and space and objects produced according to widely different techniques. If it be indeed commonly admitted that a new faith and a new spirit may invoke a similar renaissance in the domain of aesthetics, it may be readily conceded that the perpetuation of certain modes of life and thought, in a society dominated by a rigid legalism of a religious character and faithful until the dawn of the modern era to the principles established in the Middle Ages, has produced a similar fixedness of artistic traditions, as seen in the most diverse natural surroundings from the moment when they were first incorporated in the world of Islam; thus we may group under a common heading, in spite of all the exterior reasons for differentiation, works, which

6. Creswell, *Early Muslim Architecture*, *loc. cit.* p. 16.
7. J. Sourdel Thomine, *The Encyclopaedia of Islam*, Vol. II (1965) p. 776.
8. G. Carotti, *A History of Art*, Vol. II (London, 1909) pp. 116-17.
9. This art was developed by the conquered people and they "under the influence of their individual surroundings created its various ramifications," *Cf. Ibid.* p. 125; also see M.S. Dimand, *A Handbook of Muhammedan Decorative Arts* (New York, 1958) p. 7.

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derive, over more than thirteen centuries of history, from the most diverse countries and peoples."[10] Springing, thus, from the conjunction of several inheritances, in spite of all the heterogeneous elements, Islamic art has a unity of its own and this is its most distinctive characteristic. As A.H. Christie tried to denote it, its material texture was fashioned differently in different countries but its spiritual complexion, remaining the same all the time, was derived from Arabia.[11]

This spirit of Islamic art is the most important phenomenon of its history, more important than all the formal vicissitudes of its growth.[12] It was this spirit which served as the guiding factor during the course of its development; it provided the criteria and the judging standard and it was because of this factor that not only has a fundamental balance and coherence been maintained but also a unity of soul has been preserved in all the arts of Islam.[13]

10. J. Sourdel Thomine, *op. cit.* p. 776.

11. Cf. *The Legacy of Islam* (Oxford, 1931) p. 108.

12. "The spirit which governed the use of decorative formulae and the methods of construction peculiar to them characterizes it better than its borrowings, all the more so as we have to do here with an art which never felt a great love for the professional side of its work. In effect Islam was not a great constructional force both in the sense that frequently it constructed deplorably and in the sense that it did not invent or appreciably improve many architectural forms of systems of construction. From this point of view no Muslim monument is comparable with the Parthenon, the Pantheon at Rome or the Cathedral at Amiens. The mosque itself is no more than a complex of borrowings. Plan, minaret, mihrab and minbar are found in the contemporary architectures of the Arab conquest, as are the features of its decoration, polychromy, the use of polygons and the decoration of monuments with inscriptions," Cf. Andre Godard, *op. cit.* p. 255.

13. "In spite of the Arab's probable ignorance of architecture in the early years of conquest, the remarkable and incontrovertible fact about Muslim architecture is that in all countries and in all centuries it retained an unmistakable individuality of its own, although its origins were so diverse. There was something about it that differentiated it from the work of all the local schools of craftsmanship which were technically instrumental in bringing it into being.....The factor that transmuted and welded a host of varying modes of building into one style possessing individual characteristics presumably the faith of Islam; for the buildings erected by the Arabs in their early years were chiefly mosques and palaces," *Cf.* M.S. Briggs *The Legacy of Islam*, p. 157; Andre Godard explained it more fully, "Completely lacking architectural knowledge and traditions, coming to this art with empty hands so to speak, Islam, when it had to take over the administration of its vast empire, meet its needs and built in its turn, willy nilly, took over haphazardly whatever of the scanty architectural methods around it came into its hands and used them arbitrarily, without even being in a position to choose or wanting to choose. At first it used all types of vault, Syrian, Roman, Byzantine and Persian, the flat arch, the column, the

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This first Islamic art was profoundly eclectic "through its having gathered and mingled without restraint, while the conquerors are willingly susceptible to the atmosphere of the arts around them, structural or decorative elements borrowed from the practices of the conquered countries."[14] It was a continuous process of absorption and transformation.[15] The course of its development provides an extremely interesting study; "one may also understand in this perspective the multiplication of regional styles within an art whose faculty of assimilation remains its dominant characteristic and whose various stages develop within varying ethnic groups and as a result of borrowings which are undisguised; these borrowings have, however, in the course of their transmission undergone a subtle transformation which makes it impossible—even in a creative milieu as clearly individualized as that of Iran, for example—to confuse works anterior to Islam and those which belong, after the lasting triumph of the new religion, to a differently oriented cycle of aesthetic experience. Indeed, whatever be the

pilaster, brick, stone, marble, mosaic, painting and sculpture, every method of construction, every method of decoration in use in western Asia and showed no preferences. It ordered, it gave commissions and did not interfere but it soon educated itself and rapidly eliminated from its borrowings those which proved in practice foreign to its nature or too inflexible to bend to the exigencies of its taste. It became an architect but remained not much of a constructor. The ideal of the true technician, to build skilfully, for eternity, was always foreign to it : it was not interested in the duration of its monuments. Even more, it always felt a kind of sacred horror of the idea of duration : 'The proof of God', it said, 'is in the perishable nature of that which is not Him.' In a certain sense no art has been more independent of its technique, none was more purely and deliberately intellectual. Consequently it is pointless to suppose that its nature can be explained purely by seeking its origins in the imitation of foreign styles of architecture. Its true origins lie all heart and soul in Islam; they emanate from a certain conception of the universe which is peculiar to it and which we find at the back of all the manifestations of its thought." (*Cf. op. cit.* p. 255).

14. "With the one proviso that these elements be adapted, in conformity with the observance of certain rules, to the needs of the new Muslim society". Cf. J. Sourdel Thomine, *op. cit.* p. 776.

15. Thomine noted (*Cf. Ibid.* p. 776) that "other influences, sometimes transmitted throughout the Muslim world, more often integrated in lands on the periphery whence they could have but a weak diffusion—this is exemplified in North Africa or Spain just as in Khurasan or in India—continually influenced here and there the traditional modes which had gradually spread from the active capitals of Damascus or Baghdad. The receptivity, demonstrated very early, to trends coming from the East, which brought into Iraqi sculpture the characteristic rhythms and scrolls of that Asian art known as 'Steppic' was thus soon to be surpassed by the facility with which, from the Saljuq era onwards, modifications of taste and feeling

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type of monuments or objects under consideration, it would appear that the artistic production of Muslim countries has always conformed to a double set of requirements : the one imposed by the material organization of a society in which artistic patronage was bestowed principally by princes and sovereigns, impressing on the art an aulic, sumptuary and dynastic character whereby the taste for richness and brilliant ornament was necessarily developed;[16] the other, and more important, inspired by the particular form of intellectual and religious outlook which came into being in the 7th century with the preaching of Muhammad and which, far from becoming more tractable, became more and more rigid in its claims to model the life of the Muslim community according to the dictates of the holy law and the opinions of its practitioners, providing the dominant themes of architecture and encouraging the increasingly systematic employment of decoration in accordance with stereotyped formulas, remote from all realism and spontaneity."[17]

Thus grew the art of Islam. Unlike Hindu art, it developed under court-patronage, beneath the warning-eyes of the Ulema. It was an accretion without such secure foundations of solid principles, philosophical and mythological, as are met with in Indian art. Islamic art has no philosophy, no symbolism. It does not depict any abstract meaning. It is what we see it, pure and simple—an art of colour and an art of line.[18] Islamic art as we study it prior to its introduction to India

directly attributable to the Turkish invaders were to be imposed. Similarly the reception by Persia of a decorative repertoire of Chinese origin, which had been carried across the Mongol empire and was to stimulate the imagination of its miniaturists, was to have as a counter-part that extraordinary perfection of architectural techniques accomplished in 10th/16th century Ottomon Turkey by artists who applied themselves to the school of the Byzantine masters and who were to succeed in equalling, if not surpassing, Byzantine *chef-d'oeuvre* by erecting the great series of Imperial mosques in Istambul."

16. "Islamic art has depended to an unprecedented extent on the munificence and cultured proclivities of its monarchs," *Cf.* R. A. Jairazbhoy, *Art and Cities of Islam* (New York, 1964) p. 8. Indian art, on the other hand, is essentially a folk-art.

17. J. Sourdel Thomine, *op. cit.* p. 776.

18. "Islamic architecture seeks to hold the eye by sheer beauty of line and not by movement of form," *Cf.* R.A. Jairazbhoy, *op. cit.* p. 2. There is absence of the third dimension even in the early stages of its growth and the emphasis is on the interplay of flat colours, *Cf.* Thomine, *op. cit.* p. 777.

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is essentially an art of decorators and ornamenters.[19]

The four most characteristic elements of the Islamic architecture are : (i) The Arabesque (ii) The Stalactite, (iii) Geometricals, and (iv) Calligraphics.

(b) *The Arabesque*

The Arabesque has been defined[20] as "a particular, and exclusively Islamic form of denaturalised vegetal ornament consisting of shoots or split or bifurcated leaves on inorganic tendrils. The leaves may be flat or curved, pointed or round or rolled, smooth or rough, feathered or pierced but never isolated and always joined to the stalk for which it serves as an adjunct or a terminal. The stalk itself may be undulating, spiral or interlaced, going through the leaf or issuing again from it....." It is a rhythmic design of curved lines, spread over a surface, with reciprocal repetitions and insertions of geometric interlacings. The Islamic preference for curved lines can be traced from the earliest phases of its art, "when it chose the scimitar instead of the sword, the void helmet in place of the circular one, while the very word 'moonlike' came to describe the ideal beauty of a face. And by and by in architecture the block capital was replaced by a bell-shaped one, the rigid script by a cursive one and straight portal frames were imposed only for setting off their containing arch."[21]

19. Thomine's comments again aptly define the spirit of this aspect of Islamic art : "This art of the ornamenters thus corresponded to a peculiar regard for agreements and harmonies, founded, not without some aridity, on the observation of rules such as the horror of the void and the continuation of the line, in climate which produced also the melodic line of Arab music and the cadences of its poetry," *Cf. Ibid.* p. 777.

20. *Cf.* E. Kuhnel, *The Encyclopaedia of Islam*, Vol. I (1960 ed.) p. 558. The author does not accept Herzfeld's definition and prefers that of A. Reigl. The Arabic term for 'arabesque' is 'TAURIQ' which means foliage. See Appendix-B for some Islamic architectural terms. It has been called 'arabesque' not only because it owes its development to the Arab art but also because it is the outcome of a particular Arab attitude. "Even with such simple elements (geometrical lines and involutions) Arab art not only discovered an immense variety of ornamental motives but even one generic type of interwoven lines which are named after them, arabesques," *Cf.* G. Carotti, *op. cit.* p. 124. Sir Banister Fletcher is not correct when he noted, "Prohibition of the use in decoration and sculpture of human and animal forms probably led to the intricate geometrical surface decoration known as 'arabesques' a form of ornament largely derived from Byzantine art" (*Cf. A History of Architecture*, On the Comparative Method, London, 1956, p. 935). Neither was there any prohibition of animation in Islamic art in vogue, nor was the arabesque derived from Byzantine art. It is typically an Arab art.

21. Jairazbhoy, *op. cit.* p. 2.

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Arabesque design is formed of infinitely complex permutations. It has endless abstractions and give a delusion of intangibles. The extremely graceful curved lines cut across each other's paths and cross and recross each other in numberless variety in disciplined profusion. Brought about in a masterly manner by a prosaic geometer, on "an excellently decorative plane surface enlivened with deep tones of contrasting colour"[22] an arabesque provides a wonderful architectural ornament along with the arched portal and the bulbous dome.

In an arabesque design, as much as in calligraphy, lines must move with grace and rhythm[23] while the curves keep their balance in perfect poise. This linear rhythm which gives an impression of flowing movement in a surface decoration is a necessary corollary of this art.[24] Thus two aesthetic principles governed its formation, viz., "The rhythmical alternation of movement, always rendered with harmonious effect, and the desire to fill the entire surface with ornament."[25] The convolutions are balanced and serene. "The effect of contrast is obtained by differences in density, the stalk sometimes nearly disappearing beneath an abundance of foliage, at other times vigorously dominating the pattern."[26]

Fundamentally an arabesque is formed either with a geometrical design or through stylization of a vegetational pattern in an order.[27] In the former case, curves replace the straight lines and convolutions the angles. In the latter case, the acanthus, vine-leaf, cornucopia, palmette, rosette, naturalistic flowers and stems, or abstract forms such as cloud-bands provide the basis for the arabesque design.[28] The theme however

22. *Ibid.* p. 5.

23. This rhythm is called 'Tchi' in the Chinese art and has been discussed separately.

24. "The Muslim ideal was to combine a restive mass with an active surface, or in other words to inscribe a multiplicity within the framework of a larger unity. This is a mark of wisdom for life down to the smallest unicellular animal exhibits these opposites of quiescence and commotion resulting in change. Rarely have whole surfaces been covered so delectably as in the buildings of Islam." *Cf. Ibid.* p. 7.

25. E. Kuhnel, *op. cit.* p. 558.

26. *Ibid.* p. 560.

27. Thus it provides an interesting "study of the basic lines of so many opulent arabesques whose value lies in the convolutions of their stylized vegetal stems which are in other respects rather poor; or by analysis of the innumerable combinations of star-shaped polygons on which are based systems of interlacing which often serve as the starting point for further stylizations," *Cf.* Thomine, *op. cit.* p. 777.

28. E. Kuhnel, *op. cit.* p. 561.

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remains the same in either case, that is, the design flows on the surface with a rhythmic movement and gives the impression that it would carry this movement to infinity.

The arabesque was largely employed as an architectural ornament in the early phases of Islamic art in Egypt, Syria, Iraq and Persia. It appears fully developed in the buildings of the Seljuks in northern Persia and Transoxiana, of the Fatimids in Egypt and of the Moors in Spain in the 11th century A.D.[29] Henceforward its use in Islamic architectural ornamentation becomes universal and "it occurs throughout the Islamic world in countless variations, so that it is impossible to classify the various forms according to a chronological order or according to national or dynastic predilections. Persian, Turkish and Indian artists understood the language of the arabesque quite as well as Arabic speaking artists, and through the centuries they competed one against the other in creating ever more varieties and combinations."[30]

This was not used in India prior to its introduction by the Muhammedans about the beginning of the 13th century. The Arabesque was employed on the Maqsura screen of the Quwaitul-Islam Masjid at Delhi in carved stone (Plate XXXV). Here, however, the wave design predominates and the typically arabesque motif is used subsidiarily to provide a background to calligraphic designs. It is assertively employed immediately thereafter on the Qutub Minar in rotating bands in between the calligraphic designs. It is used noticeably in the spandrels of the ornamental arches of the tomb of Iltutmish about 1236 A.D. (Plate XXXVI). Thus the arabesque was planted in Indian soil along with such typically Islamic elements as the geometrical and calligraphic designs in the earliest phases of the medieval period. It was, however, used mostly on the spandrels of arches and the soffits of domes during the Pre-Mughal period, and its employment in panel-decoration on mural surfaces was rare prior to the advent of the Mughals. The best example of the arabesque motif comes from the tomb of Jamali-Kamali situated near the Qutub at Delhi. The small square cenotaph-chamber has a vaulted soffit, formed with the help of squinches, and the whole of this soffit has an

29. *Ibid.* p. 561.
30. *Ibid.* p. 561.

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intricate arabesque design in beautifully incised stucco art, which has finally been painted in dazzling polychrome.

It is interesting to note that this rhythmically flowing motif impressed the artisan of Gujarat the most. He was a master of wood-carving, and when stone replaced wood, he chiselled stone with the same dexterity and with equally wonderful results. Of all the motifs which Islam introduced into India two were particularly appealing to his taste and conducive to his art, viz., geometric design and the arabesque, which he soon learnt to work out. He used them both on carved panels and in jalies. Some of the finest examples of the use of the arabesque in carved panels come from the minarets of Shah Hasan Muhammed Chishti's Masjid at Ahmedabad and from the minarets of Rani's Mosque, Ibrahim Sayyid's Mosque and Ali-Khan's Mosque at Ahmedabad, all of the early 16th century. The effect of the beautiful arabesque design in incised carving, in each case framed within an arched niche in a sunk plane, crowned by an ornamental Toraṇa, is superb. It became an extremely popular decorative device and was employed in myriad variety, almost universally in the region prior to its incorporation in the Mughal Empire. Probably, it is here in these carved panels that the arabesque motif has been represented at its best and in the most beautiful way. The same design was also employed on the shafts of pillars and some of the best examples are discovered in a ruined temple at Champaner.

The most exquisite representation of the arabesque is brought about in the jali-art which is one of the most popular ornamental themes in Gujarat. Particularly noticeable are the jalies of Sidi Sayyid's Masjid of Ahmedabad (Plate XXXVII). Some of the arabesque designs are unique. At the outset, they appear to be vegetational, but as a matter of fact, the main trunk with outlying twigs is only a perpendicular in the isosceles triangle which forms the basis of this design. The arabesque is essentially a geometrical design so worked out as to allow infinite convolutions in a reciprocal order; repetitions are as a matter of course, based on geometric principles. To carve it on a stone surface required the skill of a master-artist but to present it in a jali-pattern was even more difficult and it was only the artisan of Gujarat who could work such wonders in a

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stone slab. Such jalies with these extremely graceful arabesques are met with in India only and nowhere else, not in Egypt, Syria, Iraq or Iran, where the arabesque motif was originally composed and developed in its earliest phases. It is commendatory that this truly Islamic motif found its most perfect expression in the land of the Infidels, The Darul-Herb, as many a historian of the medieval period preferred to designate India.

The arabesque was used by the artisans of Akbar on a large scale in Agra Fort and at Fatehpur Sikri. The Delhi-Gate pavilions of Agra Fort have beautiful arabesque designs in stucco on soffits and arched niches. The best examples of this art are met with, however, in the eastern chambers of the Jehangiri Mahal in the same fort. The arabesque is used in panel decoration in an extremely graceful format. The technique, i.e., the incised stucco in gesso-style, presenting a beautiful play of light and shadow, as much as the rhythmic flows of the design, presents a wonderful mural surface. This ornament can be compared with the best Moorish examples of its type in Spain or anywhere else in the Islamic world. The artisan who produced such marvels was not indigenous. Probably he came from Persia where this technique had come into fashion and was largely in vogue.

Soon it was realised that if arabesques are spread densely over big portions or are closely neighboured, the design appears to be confused and fretted, and the impression is lost. The minuter the tissues of the design, the greater was the necessity to present it sparsely. It was successful if worked out in small panels with plain or blank surfaces in its neighbourhood. This change of style is well reflected in the incised stucco arabesques of Fatehpur Sikri. The best examples come from Hakim's House (Plate XXXVIII). The design has been apparently floralised and adequate plain surface has been given in between, for emphasis. Besides, it has been given sophistication in details. This was an important change in the development of this ornament in Mughal art.

It is noteworthy that all the three motifs of this category, wave, floral and arabesque, were used simultaneously for architectural decoration at Fatehpur Sikri. The slight difference between them makes it difficult to distinguish one from the other. It is, however, the predominance of the characteristic

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elements of a design which helps one to recognize it. Wave-like curves and tendrils form the wave pattern. The predominant use of vegetational motifs, i.e., leaves and flowers, without any orderly basis, makes a floral design. The arabesque, unlike the other two, is mostly a regular design based fundamentally on geometric principles with repetitive and reciprocal curved lines. Generally it is stylised and a representative example may be quoted from the Badshahi Darwaza of the Jami Masjid at Fatehpur Sikri. The curves have been gracefully carved in slanting relief so much so that the carving-technique itself lends a beauty of presentation to the design. Similar are the arabesques from Birbal's Palace (Plate XXXIX).

The most magnificent arabesque at Fatehpur Sikri, however, like the best Gujarati example, is in jali art. It is the jali screen of the covered passage (viaduct) leading from the so-called Jodhbai's Palace to the Harem Minar (Plate XL). Though the rectangular plan mars some of its beautiful effect, yet the graceful curves which slither this way and that, crossing and recrossing each other in unending profusion with a set rhythm, present a magnificent ornament. The ambiguity of the central theme is removed in the arabesques in the verandah-jalies of Salim Chishti's Tomb (Plate XLI). Gradually this jali art in arabesque motif became popular in the hands of the Mughal builder and developed to such marvellous examples as are met with in the screen around the cenotaphs in the Taj-Mahal (Plate XLII).

It may be noted that the arabesque is employed more emphatically on the spandrels of arches, functional or ornamental, than on any other mural surface. The spirit of this design, based on curved lines as it is, is more conducive to representation with arched forms than on rectangular panels. It is similarly used at Salim Chishti's Tomb and at Birbal's Palace. It is again on the spandrels of the arches that the arabesque is most assertively represented at the tomb of Akbar at Sikandara (Agra). In some cases it crowns an arched alcove, (Plate XLIII), in others ornamental arches bearing geometric designs (Plate XLIV). These designs are inlaid in coloured marble and compose a beautiful ornament. The Inlaying of this flowing motif introduced an effect which was hitherto unknown in India. This masterly innovation, made in the early 17th

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century at Agra, gave the respective portal or the arched alcove an unprecedented meaning and definition. This was an Indian contribution towards the development of the arabesque.

Equally important is the fact that in the use of arabesque a tendency not only towards stylization but also towards floralisation becomes perceptible about the same time. Convolutions are retained as fundamentals of the design, but the details are formed of leaves and flowers which are painted in beautiful colour combinations. A few representative examples come from the vestibule of Akbar's tomb where these floralised arabesques have been largely used with arched forms (Plate XLV) as well as on dados and along the borders. Henceforth the arabesque is used in Mughal art in both styles, i.e., in its pristine purity with infinite curves moving on the surface in a geometrical progression on the one hand, and in an adequately floralised style on the other. Some beautiful examples of the former come from the Kanch-Mahal situated near the south-gateway of Akbar's Tomb at Sikandara and from the Tomb of Itmad-ud-Daulah, both belonging to the reign of Jehangir. These designs are used conventionally on the spandrels of arches. At the Kanch-Mahal the design is carved and then inlaid with white in a red sandstone background. It is inlaid on a plain marble surface with coloured stones at the Tomb of Itmad-ud-Daulah (Plate XLVI). Arabesques of the latter style are more abundantly used. It is beautifully carved in incised relief in white marble on the soffits (intrados) of the arches of the Tomb of Itmad-ud-Daulah. The effect of this exquisite work is extremely graceful and excels any work of this class anywhere in the Islamic world. The pavement of the upper pavilion of this tomb has a wonderful design inlaid with coloured stones (Plate XLVII). This too is essentially arabesque retaining the beautiful curves, though, in accordance with the spirit of the age, floral motifs are intermittently woven in it which enhance the overall impression of the ornament and prevent any probable monotony which an arabesque might have presented on such a large flat surface. This is not only one of the best representations of the motif but the best in Mughal art. The examples at the Taj-Mahal are simpler obviously because the architect of the Taj-Mahal was not prepared to lay emphasis or even credence on one ornament or other, but on the architectonic effect

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as a whole. The tomb of Itmad-ud-Daulah has a different spirit with emphasis on the exhibition of coloured schemes in varied designs; it belongs more to the history of architectural ornamentation than to the history of architecture itself.

The arabesque was employed in the buildings of Shah Jehan in carved and inlaid marble. The spandrels of portals and arched alcoves at the Taj Mahal have inlaid designs marvellously floralised (Plate XLVIII). They are neighboured by voids and plain surfaces and are emphatically presented like a jewelled necklace on a fair bosom. Similar are its representations in incised painting in the Mehmankhana and the Mosque adjuncts (Plate XLIX). Here the floralised form has been perfectly stylized so as to provide a ready-made motif to the traditional artisan.

The arabesque was again used in panel decoration in carved red sandstone at the tomb of Firoz Khan at Agra. These examples remind one of the extremely graceful panels of Birbal's Palace of Fatehpur Sikri. The Chini-ka-Rauza at Agra which is one of the best examples of glazed-tile decoration in the world has arabesques in coloured tiles (Plate L). They have been used in spandrels like their counterpart at the Tomb of Itmad-ud-Daulah and the Taj Mahal in a variety of presentations. In every case, however, the design has been thoroughly stylized. This is how the Mughals put their own stamp on the motifs and designs which they borrowed initially from various sources, indigenous and extraneous.

(c) *The Stalactite*

Like the arabesque, the stalactite[31] also owes its growth and development to Islam. This honey-comb motif, as it is sometimes called, is the most characteristically Islamic ornament which has been used universally in Islamic art structurally as successfully as ornamentally. Its form seems to have been derived from the Egyptian 'gorge' which was a purely ornamental cornice of roll and hollow moulding crowning the massive blank walls of the Egyptian buildings.[32] The Persians occupied Egypt in the 6th century B.C. and with them it came to Iran where it first appeared as a honey-comb motif about the same

31. From Greek 'Stalaktos'—a deposit of calcium carbonate (as calcite) resembling an icicle hanging from the roof or sides of a cavern; it is called 'Mukarnas' in Arabic.

32. Sir Banister Fletcher, *A History of Architecture* (On the Comparative Method) (London, 1961) p. 53, his Fig. on p. 55.

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time, e.g., at the Palace of Darius I at Persepolis.[33] (Fig. 6). It was widely in vogue in Mesopotamia about the beginning of the Christian era.[34] Soon it developed from an ornamental motif to a structural contrivance with substantial aesthetic merit, used in the phase of transition in dome-construction. Roofing was always a basic problem for the architect in all countries in all ages. It was a particularly difficult matter to solve when it was desired to build a spherical dome over a square ground plan. The Romans built their domes on circular or polygonal structures which posed no serious problem of superimposition. It was, however, different in Iranian and Byzantine architecture. The Palace of Firuzabad situated south of Persepolis (c. 250 A.D.) has three square halls which are roofed by domes built with the help of 'squinch' arches thrown across the angles. The Egyptian 'gorge' appears on the internal frieze as an ornamental motif.[35] The Palace of Sarvistan, also situated in the vicinity of Persepolis, built about 350 A.D., also had a domed hall, again built with the help of squinch arches.[36] The Byzantine architect used 'pendentives' instead, at the corners the square room to obtain a circular base for the spherical dome.[37] Thus various expedients were devised in the phase of transition, i.e. in the manipulation of the transition from the square base below to the circle of the drum above, by superimposing the angles with 'pendentives', 'squinch' arches and 'stalactites'.

As we meet with them, both squinch and stalactite are typically Islamic elements. The squinch is an architectural device consisting of a series of concentric arches thrown across the angles to reduce the square to an octagon. It was an ingenious exploitation in brick of an idea that was probably tried out originally in wood by setting beams across the corners forming an octagon, and by a similar method, a 16-sided shape, and so on, until the whole area was covered. The first phase was

33. Andre Godard, *op. cit.* p. 128 Plate-65. Sir Mortimer Wheeler (ed.) *Splendours of the East*, Plates on pp. 42-43.

34. K. A. C. Creswell, *Early Muslim Architecture* (1958) p. 49.

35. Sir Banister Fletcher, *op. cit.* p. 79. Creswell calls this motif the 'Egyptian reed cornice' *Cf.* The History and Evolution of the Dome in Persia, *The Indian Antiquary*, Vol. XLIV (1915) p. 136. The squinch thus owes its origin to Sassanian art.

36. Sir Banister Fletcher, *op. cit.* p. 79; Creswell, *loc. cit.* p. 137.

37. Sir Banister Fletcher, *op. cit.* p. 276. This seems to have been done without temporary support ('centering') by the simple use of large flat bricks.

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most difficult to handle and at the same time it most decisively determined the aesthetic impression of the interior. The squinch device served the purpose both ways. It converted most conveniently the square hall below into an octagon above and at the same time presented a beautiful ornament at the corners, gradually reducing the internal space to the exquisite ornamented apex of the spherical soffit. It was thus a quarter sphere, the head-arc of which projected over the corner of the square supporting it.[38] It was largely used in Persia and was developed in a wide variety of beautiful denominations, so much so that the squinch gradually became a typically Iranian feature.

The Islamic artisan contrived the super-imposition of several ranks of cell-like niches called 'mukarnas' or stalactites.[39] As a matter of fact, this is also a variety of squinch. "Each cell provided a ledge for another above it so that the whole cluster overhung."[40] Though it was a potentially complicated form with a strong element of fantasy, it was based on correct geometric principles. The nature of the aspiration of Islam could best express itself in the growth of a complex architecture, e.g., in the employment of a dodecagon for processing a pyramidal movement, in which the monument converges towards the summit.[41] It was a masterful combination of a square plan

38. G. Marcais, *The Encyclopaedia of Islam*, Vol. I, *op. cit.* p. 1228.

39. Cells (Mukarnas) may be curvilinear or straight.

40. Jairazbhoy, *op. cit.* p. 5.

41. Al-Gayet, *L'Art Arabe* (French ed. Paris, 1893) p. 136. It is wholly a geometrical diagram. Inside the square a circumference is drawn (Al-Gayet Fig. 44). The sides of the dodecagon tympanum will be found in the intersection of two hexagons which, when drawn inside this circumference, will have respectively the two axes of a square as summits. The intersection of their sides takes place on the diagonals of a square similar to a drawn figure of which 4 sides will be tangential to the four sides of the squares. Outside the tympanum, the intersection of the two hexagons determines on each angle of the square, a parallelogram to which two equal isosceles triangles assemble. Each of these polygons then becomes the basis of a rectangular pyramid which gradually redeems to square of the room with polygonal tympanum by a succession of 'diedre-glacis', while the top of the angular pyramid touches the basis of the two others, and the summit of these leans their back against the middle of the two corresponding parts of tympanum. There is another method of bringing about this phase of transition. An octagonal tympanum is drawn on the square. Four of its sides are equally on four sides of square. The angular transition is then provided by a triangular pyramid, the top of which is on the middle of the sides of tympanum to which it is attached. (*Ibid.* pp. 136-38.) These two principles may be exploited in a great number of variations, each derivative form leading to the same result.

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with a domed section with stalactites skilfully used in the phase of transition. Without doubt, it was the 'architectonic of the vault'[42] which inspired the early Islamic builders to devise it. In some of the early examples 'gropings' were used in transition between the square of the room and the circumference of the dome. One of their principal effects was the establishment of this succession of blind arcades, of which each tympanum was composed, and which when placed in a row one above the other on their periphery, produced interlaced ornamentation. This immensely inspired the later artist. With the help of 'encorbellement' he could project it onto space. A very rhythmic polygony, so conducive to the taste of Islam was thus produced. Soon he became so fond of it that he concentrated his whole effort towards its perfection. Thus what was in the beginning a method of construction only, gradually became an ornamental system which was a perfectly expressive architectural formula.[43] Though such diverse elements as polygons,niches and pendentives were used, an absolute mathematical relationship was maintained; the perfect geometric formula which was employed in the formation of stalactites gave a wonderful symmetry of lines and a unique combination of sweet rhythms. For the early Islamic builder it was "a pure statement of an aesthetic theorrem."[44] Characteristic of his art, it was representative of his mood and his taste as much as of his ingenuity and his skill to face the constructional problems with the geometry of which he was a master and which he could exploit into limitless vistas of aesthetic expression.[45]

42. *Ibid.* p. 138.

43. *Ibid.* p. 139. It had a fixed law but it could represent, through variations, a particular order of thoughts. The polygonists devised the best of it. In the trompe (Al-Gayet Fig. 46) niches were carved through encorbellements according to a conscious order and were placed agreeably to a far-seeing plan, gathered in groups of regular polygons. Later on, the trompe became pendentive; niches were spread all around the soffit of the cupola (Al-Gayet Fig. 47 to 51; *Ibid.* pp. 139-40). The method of the construction of stalactite in some pleasing variations has been recounted by Al-Gayet *Cf. Ibid.* pp. 140-63.

44. *Ibid.* p. 145, "L'ornementation d'une coupole se resumait donc pour l'Arabe en une epure de geometrie. C'etait pour lui l'enonce d'un theoreme d'esthetique."

45. Al-Gayet was correct in his assessment when he noted (*Ibid.* p. 152), "Ces lois immuables de l'assemblage, si puissantes qu'elles nous

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The stalactite first remained attached to the vault-pendentive, sometimes supported on wooden corbels. It replaced the latter about the beginning of the 13th century when its usage became universal for the ransom of all overhanging parts. Then grew the idea of turning these isolated supports into continuous supports in numerous layers. The stalactite thus developed to an accurate, systematic and regular combination of vertical prisms, carefully disguised.[46] These prisms are seven in number in the geometric formula, and can be brought back in plane into three basic polygons : the right angle triangle, the isosceles-triangle and the parallelogram. Though this scale remains immoveable, the variation of rhythms is infinite. They depend only on the mode of assemblage and on the harmony of profiles.[47] In the skilful hands of the Islamic builder the stalactite became a perfect architecture, the plan, elevation and section of which always remained in unison.[48]

It has since been used almost as universally in the monuments of Islam as the arch and dome, or as calligraphic and geometrical designs and, truly speaking, the stalactite is as characteristic of Islamic art as are all these latter elements. For the Islamic builder, it was invested with the most subtle delicacies of mystic ecstasy, a majestic serenity and a transcendent beauty. Some-

disent mieux que les recits des historiens et des poetes ce que l'Arabe a cru et aime." (These laws of assemblage tell us more of the Arabic soul than the tales of historians and poets).

46. *Ibid.* p. 154.

47. "La gamme en est immuable, les rythmes qu'on en peut tirer infinis; ils dependent uniquement du mode d'assemblage et de l'harmonie des profils." (*Ibid.* p. 154). As a result of the union of prisms (1, 2, 3, 4, 5, 6 and 7) the stalactite was disposed in two distinct series. The upper one is only an indefinite repetition of the triangular prism 6, 6, 6 in which are set two parallelogramic prisms put together 4, 4 alternatively with a pentagonal prism 5, 5. On this first line is placed an intermediate line, that of triangular prisms 7, 7 the top of which is placed on the top of the triangular prisms 6, 6. The second series first completes this line with a triangular prism 9, 9 the basis of which leans on the basis of the two pentagons of the first series. Then it establishes the two last lines by the alternative use of prisms 1, 2, 1, 3, 3; 1, 2, 1, 3, 3. In consequence, the stalactite is not a sculpture, but is primarily a polygony. It is a constructive network. The manipulation of the plan with reference to the circumference of the cupola is again elaborately discussed by Al-Gayet, *Ibid.* pp. 157-59.

48. *Ibid.* p. 155.

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times as many as fourhundred thousand prisms were used in rows around a single cupola,[49] yet the rhythm, and harmony, is so perfectly maintained that one forgets its unreality and stands spell-bound by the charming fantasy of the perfectly rendered illusion.

The stalactite was used at the Juma Masjid of Nayin in the 10th century A.D. in stucco on the mihrab.[50] It was similarly employed decoratively on the minaret of Al-Juyushi (c.1085 A.D.) and on the facade of the mosque of Al-Aqmar[51] at Cairo (c. 1155 A.D.). Its use became universal in the whole of the Islamic world about the beginning of the 13th century, particularly in Iran where it developed to most sumptuous heights. The tombs of Ray, the Tower of Bostan and the Juma Masjid of Veramine have beautiful stalactites. There, still they are a decorative expression logically deduced from the method of construction.[52] The stalactites of the tomb of Hulagu at Maragha and in the inner porch of the Juma Masjid of Ispahan also belong to this category.[53]

As anywhere else, the stalactite in Persia was initially a constructive expedient. Besides its universal employment in the phase of transition in dome construction, it was also used in the vaults of portals and minarets, and also on cornices. In some cases, even cornice and vault stalactites were made of prisms of wood, the most easily manipulative material, set side by side, on the lower face of which were hollowed out those curvilinear elements, the succession of which forms the stalactites.[54] These interior faces were always curved and consequently the character of the stalactite was to present a succession (suite)of successive concavities. But gradually the aesthetic impression became the determining factor of its usage. It was used more popularly than the squinch or any other pendentive, and the most important aspect of its development is that it was not only with the sole purpose of making encorbellements, vaultings and cornices that the stalactite was employed but also with the object

49. *Ibid.* p. 160.
50. Andre Godard, *op. cit.* p. 224, Plate-126.
51. M. S. Briggs, *The Legacy of Islam, op. cit.* p. 170.
52. H. Saladin, *Manuel d'Art Musulman,* Vol. I (L'Architecture) (Paris, 1907) pp. 317-19.
53. *Ibid.* also see his figs. 264, 253 respectively.
54. *Ibid.* p. 319, fn. 3.

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of giving each respective portion a substantial ornamental merit which was so inherently in accordance with the Islamic spirit of the love of the line—preferably a curved line.

Hindu architecture was essentially trabeated and employed the beam-and-post system universally. Though specimens of corbelling have been found in the Harappan culture and the true arch has also been discovered at Bhitargaon and other sites, they are almost exclusively limited to brick-constructions. Stone being the chief building material of the Hindu artisan, he was not conversant with the use of the radiating arch or vault, much less with the squinch, stalactite or any other pendentive of this class. Hence we find the huge arches of the Maqsura screen of the Quwait'ul Islam Masjid at Delhi, the first mosque in this part of the country, built on the trabeate principle with simple corbelling.

Unbounded, however, is the capacity of the Hindu builder to learn new methods and techniques and absorb them in his own system. He rose to the occasion when his Muslim patrons decided to build the Qutub Minar as the first great monument of Islam, with characteristically Islamic features on the conventionally Islamic pattern. Probably drawings of stalactites were provided which he successfully translated in to stone and thus we find stalactites used to support the balcony of each storey of the Qutub Minar (Plate LI). The stalactites of the Qutub Minar are perfectly done and one stands amazed at the skill of the indigenous artisan in working out such foreign elements without any weakness. It goes without saying that the stalactite of the Qutub Minar is the first example of its use in India.

It is important to note, however, that these stalactites have been carved in stones which corbel out from the main body of the Minar supporting the balcony. As a matter of fact, the same purpose could have been served with the use of brackets, the load in either case resting horizontally. It would thus appear that these stalactites are not so functional as they appear to be but are mainly ornamental. Truly speaking, while the minar has calligraphic and arabesque designs in carved stone, there is no architectural ornament except this stalactite of the balconies and it is the representation of this ornament that is the distinctive characteristic of the Minar.

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This is more convincingly observed in a few domed chambers situated to the south-west of the Qutub Minar in the series of buildings, which is erroneously known as Allauddin's College. They are covered by vaulted soffits, and stone beams placed systematically one over the other on the corbelling system diagonally over the corners have been used as pendentives in the phase of transition. The artisan could have safely left these stone beams plain but merely for the sake of ornamentation he has carved arched niches on these beams with perfect symmetry, so much so that the pendentive as a whole gives at first sight the impression of stalactite. This is purely decorative. The fact thus stands out that with the use of stone many constructional problems could be solved and merely by a skilful treatment of the external surface many constructional forms could be faithfully presented without actual constructional involvement. This phenomenon which is first perceived here in the beginning of the 13th century finds its best expression in the buildings of Shah Jehan about the middle of the 17th century, when even the arch, carved on a single slab of stone, is reduced to an ornamental form.

There are scores of such wonderful devices which the indigenous artisans used in the phase of transition in these early Islamic buildings at Delhi. They now lie scattered near the Qutub and offer a wonderful study of the early phases of the development of Islamic architecture in India, in the solving of the constructional problems by the indigenous builder who was employed on the architectural projects of the Delhi Sultan.

Probably the first attempt to build a dome was made at the Tomb of Iltutmish about 1236 A.D. A squinch arch was used in the phase of transition, to convert the square hall below into an octagon above and then simple pendentives, supported on beautifully designed bracket-stones were used at the angles of the octagon to convert it into a 16-sided vault (Plate LII). It may be observed that, entirely a stone construction as it is, this squinch was not built on the true-arch principle; it is again the traditional corbelling (kadalikā-karaṇa) method of the Hindus which has been used here. It is possible that at least the dome was built on true-vaulting with temporary centering but again the stone boulders of the dome, which fell at some unknown date, are found to have been carved in horizontal

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courses and no conclusion can be deduced with certainty. It may be observed, however, that the Hindu artisan is always there to assert his presence this way or that, and the Muslim patron, unless specifically fanatic like Firoz Tughlaq, is found to have generally acquiesced with the easier alternative and better effect. Without doubt, the exquisite carving work of the stone elements more than compensated for the concession. It was thus the aesthetic impression which virtually played the decisive role.[55]

All the three important monuments of Delhi of the first quarter of the 14th century, viz., the Allai Darwaza (c. 1310), the Jamatkhana Masjid (c. 1315) and the Tomb of Ghiyasuddin Tughlaq (c. 1325) are domed constructions and squinch-arches, now on the radiating arch principle, were used in the first phase of transition, i.e., where the square is converted into an octagon. In either case, the dome does not rest directly on the octagon. Through a second phase of transition with the use of simple pendentives, in these cases beams of stone laid diagonally across the angles of the octagon supported on bracket-stones, a 16-sided base is obtained which is again, with the help of a similar device, sometimes converted into a 32-sided figure thus providing an almost circular appellation for the base of the dome. The squinch is generally used in these monuments, as also in scores of square tombs in 15th and 16th century, in Delhi, while stone beams with bracket-stones are used in octagonal tombs, their plan itself not involving any major constructional problem of a phase of transition.

In the mosques of the Firuzian era it is neither the squinch nor the stalactite but the simple vault, built with the help of temporary centering, which is used almost universally in dome-construction. Moreover, these mosques are of rubble and mortar and in such a precarious material as this, no aesthetic enterprise, such as a squinch or stalactite might have introduced, could have been afforded.

Two beautiful mosques of Delhi of the first half of 16th century, each representative of its own class, viz., The Bara-Gumbad

55. It is also important to note that the squinch was used in the Vishwanath Temple of Benares (Varanasi) which was converted into a mosque during Aurangzib's reign. It is still to be seen intact among the ruins of the temple behind the mosque. Obviously, it was built sometime in the pre-Mughal period.

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Masjid situated in the Lodi Gardens (Plate LIII), and the Qila-i-Kuhna Masjid in the Old Fort, have stalactite designs in the phase of transition. The squinch is used in the nave of the former while the stalactite is employed in its side bays. The whole surface has been thoroughly plastered over and exquisitely ornamented, but it looks as if this stalactite was formed with the help of stone-beams. Stone pendentives were actually used in the second phase of transition, supported by beautiful bracket-stones. Thus it is again the native corbelled method of construction, though employed, through a skilful use of stucco art, to bring about a stalactite form.

The Qila-i-Kuhna masjid is entirely a stone construction. There are beautiful squinch arches in the nave (Plate LIV-a), though as usual, stone pendentives with bracket stones were employed in the second phase of transition. This squinch is built on the true arch principle. The next bays have a very delicately chiselled stalactite in the first phase of transitition (Plate LIV-b). In the extreme side compartments a cross-rib and semi-vault method has been employed (Plate LIV-c) to obtain an accurate soffiit in the interior, without any need to build a dome over it. This structural expedient is as ingenious in conception as it is artistic in effect. It goes without saying that the use of stone, sometimes large stone beams, much facilitated the work of the architect.

It can thus be seen that almost all the constructional problems had been solved during the pre-Mughal period and the stage was set for the artisan to concentrate on the presentation of forms in a beautiful way without engineering handicaps. As a matter of fact, the Pre-Mughal heritage is also, to a large extent, responsible for the grace and charm of Mughal architecture.

The stalactite used at the springing of the Dome of Humayun's Tomb at Delhi is ornamental. It is more the design than the method of dome-construction which worked wonders in the imagination of the Mughal builder and he used this design on the capital of his pillars, on cornices, on the semi-soffits of alcoves and portals and on the soffits of domes and cupolas, almost universally from Akbar to Shah Jehan. The capitals of the pillars of the Jehangiri Mahal in Agra Fort, the tomb of Salim Chishti and the Panch-Mahal at Fatehpur Sikri, the tomb of

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Akbar at Sikandara and the Diwan-i-Khas of Agra Fort, for example, are of stalactite design. Examples of its use on cornices and soffits abound. A beautiful form of the stalactite can be seen in the entrance-chamber of the Jehangiri-Mahal in Agra Fort (Plate LV). The design is repeated in the second phase of transition. It may be noted that the squinch on the true-arch principle was also built in this palace of Akbar in the north-western chambers, and true vaults have also been employed in the eastern and southern rooms. The architect could have thus used the structural stalactite conveniently, had he desired to build it. But, obviously, he preferred to use it as an ornament rather than as a structural contrivance.

This is adequately illustrated in the stalactite design used in the Delhi-Gate pavilions of Agra Fort (Plate LVI). The construction is in brick-and-mortar and stucco has been used for ornamentation. The angles are vaulted at the phase of transition as is the case in the mosques of the Firuzian era at Delhi. A stalactite design, beautifully adapted to the size and nature of the space it covers and devised on the principle of geometrical progression, which is responsible for the unity and harmony as a whole, is used at these angles. It is purely decorative. The same ornament is employed on a much larger scale at the Large Baths at Fatehpur Sikri, sometimes with wonderful effect (Plate LVII & LVIII). It is done here in incised stucco with the decisive lines duly painted. The stalactite design inside the Tomb of Salim Chishti is associated with a variety of exquisite florals and is profusely painted in pleasing tints and tones (Plate LIX). Thus the Mughal stalactite deviates from the spirit of the early Islamic stalactite, inasmuch as it is ornamental in conception as well as in theme.

It is only rarely in Mughal art that the stalactite has been used structurally. It is even less in use than the squinch. We meet with beautiful examples of squinch arches at Fatehpur Sikri, most noticeably in the nave of the Jami Masjid (Plate LX). Here it is as effectively used as in the Jamatkhana Masjid of Delhi built some 150 years before it. The Fatehpur Sikri squinch, however, has a profusion of the use of bracket-stones supporting the stone pendentives, which marks its development from a typically Islamic device to an adequately Indianised expedient with substantial aesthetic merit.

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The phase of transition in the square chambers of the aisles of this Masjid is a marvel in the history of Islamic Architecture. There is a skilful use of corbelled pendentives in the phase of transition, one over the other in enlarging successive layers (Plate LXI), each one having a beautifully carved design, so that the square chamber below is converted into an octagon above to provide a base for the drum of the dome (Fig. 7). It marks the consummation of the effort of the indigenous builder to adapt his own trabeate method to dome-construction and it is here that his skill in finding out ingenious ways and means is best reflected. This corbelled-pendentive device simplifies the whole structural problem and immensely facilitates the superimposition of a dome over a square ground plan. The aesthetic impression of the interior too is immensely enhanced, inasmuch as the carved details of the design are more effectively presented on the projecting pendentives than in the void of a squinch. This provided a beautiful ornament to the structure. The architectonic effect of this pendentive is aesthetically as impressive as can possibly be conceived in the age of Akbar.

A beautiful form of stalactite has been used in the first storey balcony of the minarets of the main gateway of Akbar's tomb at Sikandara (Plate LXII). This and the flutes on the external surface of this storey suggest that the architect had the ornaments of the Qutub-Minar in view and wanted to improve upon them. Tastefully chiselled in white marble, both these elements combine gracefully to give the slender minaret an effective rise. The second and third storey balconies have bracket-supports.[56] The chhatri which crowns each of these minarets, is rhythmically set with these brackets and this combination too is equally beautiful.

All the front alcoves of this gateway have stalactite soffits which are beautifully painted in red-and-white in incised art. The main tomb also has a stalactite design on the soffits of its portals,[57] splendidly painted in each case. The most

56. It may be noted that only their first storey was found intact in 1902 when Marshall took over the Department of Archaeology as its Director-General. They were restored between 1902 and 1909, it is expected, on original lines as per rules.

57. It is a curious paradox that bees are at present actually building honey-combs (in abundance) on these soffits !

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effective presentation of a stalactite design in colour is, however, found here on the vaulted soffit of the vestibule leading to the mortuary hall (Plate LXIII-a and LXIII-b) and iwan of the western gateway (Plate LXIII-c). Floral motifs add as much grace to the stalactite as does the incised technique of the art. It is surprising that the artist could work out the stalactite design correctly and with such geometric precision and symmetry on such an irregular surface. Equally minute and detailed are the stalactite designs of the tomb of Itmad-ud-Daulah Agra, on the soffits of the corner chambers (Plate LXIV) and the main hall. The most beautiful examples of this use of stalactite design, however, come from the Chini-ka-Rauza (c. 1639 A.D.) situated at a little distance from the tomb of Itamd-ud-Daulah (Plate LXV). Their extremely ornate Persian theme and the gracefully manipulated three-dimensional effect is rarely met with in other medieval monuments of India. The presentation of the minutest details of floral motifs with an absolute geometrical precision works wonders on the aesthetic feeling. This expresses here, more than anywhere else, the superb and sublime effect of Persian design and the unrestrained emphasis by the builder upon it and more than justifies Arthur Upham Pope's masterly dictum that "Ornament can both embellish architectural form and exist as an aesthetic achievement in its own pure design."[58]

The stalactite is used in the buildings of Shah Jehan on a very large scale. In the Shahjehani Mahal in Agra Fort, the cornice in the main hall and all around the east room and the vaults have a stalactite design in stucco. The Khas-Mahal in the same fort has stalactites on marble alcoves and arches. The pillars of the Musamman Burj have stalactite capitals. The soffits of the alcoves and the overlapping cornice in the Diwan-i-Khas also have stalactites. It is popularly used for the ornamentation of the arched and vaulted soffits of alcoves and portals at the Taj-Mahal. Noteworthy however is the fact that in both stucco and white marble, except for few exceptions, the stalactite is used ornamentally, i.e., as a design, in the buildings of Shah Jehan,

58. *Cf. Persian Architecture* (London, 1965) p. 132.

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and its structural implication is not much in view. It was the aesthetic effect of the stalactite, rather than its suggestion of fantasy which was so spontaneously understood by the early Islamic builders who developed it, that served as the guiding principle for its use by the Shahjehanian artisan. As a matter of fact, he had so much varied material at hand, and such a vast number of motifs and designs was available to him for ornament unlike the Islamic builder whose resources of design were limited, that reliance on the stalactite alone was hardly required.

The Shish-Mahal of Agra Fort, which also belongs to the age of Shah Jehan, is a unique construction in this respect. Its interior has glass-mosaic ornamentation and the sole design employed above the cornice including the vaulted ceilings is the stalactite (Plate LXVI). This is most exquisitely presented with a harmony and rhythm which was hitherto unknown in India as far as the employment of the stalactite was concerned. It is the rehabilitation of fantasy in right earnest, and probably it is here that the true spirit of the stalactite is most faithfully reflected. The ethereal impression of the interior is made possible as a result of these prisms, which are as structural as they are ornamental and no other design could have possibly brought about this magnificent effect. This is how the ornamental aspect once more asserted itself in the buildings of Shah Jehan, though this time with a different theme and with an altogether different emphasis.

(d) *Geometricals*

The ancient Hindus used some geometricals, e.g., on the Dhamekha Stūpa at Sārnāth of the Gupta period[59] in carved stone, on the ceiling of Ajanta Cave No. 1 in painted designs and also on the ceiling of Cave No. 32 of Ellorā.[60] But

59. "In the manner of the painted ceilings of Ajanta" Cf. A. K. Coomaraswamy, *History of Indian and Indonesian Art* (Dover ed. 1965) p. 75; the ornament does not consist of chevron as has been noticed by Benjamin Rowland, *Cf. The Art and Architecture of India* (1959) p. 127. See his fig. 78(A). The design consists of a svastika repeated in reverse order in alternate lines with interposing triangles.

60. R.S. Gupte, *Ajanta, Ellora and Aurangabad* (Bombay, 1962) Plate CXLIII.

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their geometricals ornament their monuments only as exceptions and not as a rule; they are so rare ! Like the arabesque and stalactite, geometricals also owe to Islam their development to such heights. No doubt, the Romans knew and used the geometrical ornament and the examples of the Great Temple of Palmyra (36 A.D.), the Domus Augustana on the Palatine, (81-96), the Church of Procopius (526) and of St. George (529-30) may be cited among the most prominent pre-Islamic geometricals.[61] But their use was restricted and the designs show a poverty of imagination. "Its full development belongs to the art of Islam."[62] The universal employment of geometric ornament of amazing complexity is one of the main characteristics of this art.

The earliest Islamic examples come from the Great Mosque of Damascus (705-15).[63] It contains six beautiful jalies with four different geometrical patterns. One is formed of equilateral triangles by sixes so as to obtain hexagons in contact at their corners.[64] The same network of hexagons forms the basis of the geometricals of the mosque of Ibn Tulun (878-79).[65] These patterns are classed in the Hexagon Group (or the 60° Group because the mesh on which they are drawn is composed mainly of lines drawn at 60°). The window grilles of the Mosque of Ibn Tulun also have geometrical patterns composed of compass-work, i.e., interlacing circles and segments of circles.[66] The other grille at Damascus "is composed of a simple combination of squares with large interlacing circles struck from the centres of alternate squares and small circles struck from the centres of the remaining

61. K.A.C. Creswell, *Early Muslim Architecture* (1958) *op. cit.* p. 75.

62. *Ibid.* p. 75.

63. They "constitute the earliest geometrical designs in Islam" *Cf.* K.A.C. Creswell, *The Encyclopaedia of Islam*, Vol. I (1960 ed.) p. 612. It may be noted that geometrical ornament and interlacing patterns are wholly absent from the mosaics of the Dome of the Rock which constitute the first and the most ancient Muslim decorative scheme known, *Cf.* K.A.C. Creswell, *Early Muslim Architecture*, Vol. I (Oxford, 1932) p. 227.

64. Creswell, *Early Muslim Architecture*, fig. 12.

65. *Ibid.* pp. 75, 302, 311; Al-Gayet, pp. 65-66; Creswell *Cf. The Encyclopaedia of Islam, op. cit.* p. 320.

66. "Grilles entirely composed of interlacing straight lines, so universal later on, do not appear to have been employed at this period" *Cf.* Creswell, *loc. cit.* p. 320.

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squares."[67] An Octagon Group was also known at an early date, with either equal or unequal sides. The coffered ceiling of Sultan Qalaun's mausoleum at Cairo has this pattern. Geometrical networks, being mostly octagons in contact by their sides, were used at Samarra about the middle of the 9th century. In the mosque of Al-Hakim (980-1012) geometric ornament is to be seen in a fully developed state. By the end of the 12th century it is in universal use throughout the whole Islamic world.

The geometrical of the Baghdad Gate of Raqqa near the Euphrates, built by Al-Mansur about 772 A.D. is also reckoned among the early examples. It consists of four svastikas and five squares and is executed entirely in brick work. "This is the first example of this technique, known locally as hazarbaf (Thousand Twistings) which was destined to be elaborately developed later on in Persia."[68] As a matter of fact, it is in Persia, again, that this ornament was developed with detailed choice and keen liking as a pure design, sometimes even independent of the surface it adorned. Examples abound in the whole of Iran in stucco and glazed-brick art. Some representative examples of the latter come from the circular Tomb of Maragha (1167-68) and the Mausoleum of Uljaitu Khudabanda (1304-16) at Sultaniya.[69] Round the base of the drum of the dome of the latter monument, an inscription frieze has been worked out which is similar to the one used at the tomb of Shaikh Safi'al-Din at Ardabil (14th century).[70] It has been designated the angular chinoiserie style, "The motif which is the basis of the decoration of the drum comes from the Arabic way of writing Allah. This angular script which recalls archaic Chinese seals, first occurs as a decorative motif on the monuments of the first Il-Khans and thus may well be a case of Far Eastern influence."[71] They appear to be geometricals but as a matter of fact, they are calligraphic compositions.

A large number of complex geometrical designs were introduced into India during the Sultanate period. As the

67. Creswell, *Cf. Early Muslim Architecture*, p. 78, Fig. 15.
68. *Ibid.* p. 186, Plate-32. The svastika is used here only as a geometrical motif without any symbolism in view.
69. Andre Godard, *op. cit.* Plates 133 and 137 respectively.
70. *Ibid.*, Plates 136 and 135 respectively.
71. *Ibid.* Plate-135.

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emphasis was primarily on the arabesque and calligraphic art, geometricals do not find an adequate status in the early ornamental schemes of this period. It is about the beginning of the 15th century that these designs are used with assertion in the square and octagonal tombs of the Sayyids and the Lodis at Delhi, chiefly in stucco art. The Bara-Gumbad Masjid has some of the finest examples of this art of the early 16th Century. The Qila-i-Kuhna Masjid has some beautiful geometricals in an inlay of coloured stones.

These designs, however, owe their development in India to such magnificent heights to the Great Mughals. Even in the very first architectural enterprise of the Age of Akbar, viz., the Tomb of Humayun at Delhi, these designs are used abundantly and effectively both in mosaic of stone and in stucco. They were employed on a large scale in Agra Fort by the artists of Akbar. Sometimes they occupied a prominent space, e.g., the frieze on the west facade of the Jehangiri-Mahal, executed in white marble inlay in red sandstone. They were also used in carving on panels, as effectively as in stucco. Some designs belong to the Svastika Group.

The Jami Masjid of Fatehpur Sikri has geometrical designs in a mosaic of white marble or coloured stones, on the Buland and the Badshahi Darwaza and also in the sanctuary. They mostly belong to the Star Group and are put into commission as gorgeously for architectural decor as silver sequins are used on a red silk saree (Plate LXVII). Some marvellous geometrical designs are to be seen in the Hammams in exquisite incised stucco art. A few examples from the Large Baths are superb and can be compared with the best in Iran or Spain (Plate LXVIII & LXIX). The geometricals used on panels in carved stone, e.g., at the so-called Sultana's House and Birbal's Palace exhibit the lucid ingenuity of the Mughal geometer in working out his own designs. Those at Birbal's Palace, i.e., on the pilasters and panels are unique (Plate LXX).

The most wonderful use of geometrical designs at Fatehpur Sikri is, however, in the Jali art. Some patterns have been so minutely carved in the jalies of the struts which support the exterior chhajja of the Tomb of Salim Chishti that they resemble the best ivory-work (Plate LXXI). The interior

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verandah has an unprecedented profusion of jalies (Plate LXXII) most of which have geometrical designs. Some are so graceful that they give an ethereal impression to the interior (Plate LXXIII). They are perfectly in tune with the space over which they gorgeously stand.[72] It is here probably for the first time that the geometrical designs are used so decisively in the ornamental scheme for a superb and sublime aesthetic effect, which was pre-calculated in all likelihood by the Mughal artist who was fully conversant with the taste of the tropical aristocracy. The number of geometricals employed at Fatehpur Sikri is legion and one stands amazed at the ingenuity of the Mughal geometer in devising such a wide variety of patterns for use in all the schemes of decoration which were then in vogue.

Akbar's Tomb at Sikandara (Agra) also has geometrical designs as one of its principal ornaments. Here the artist has overcome the hesitation which is sometimes perceptible at Fatehpur Sikri and his patterns are presented boldly, assertively and emphatically sometimes at the cost of other motifs. The south gateway has a wonderful series of geometrical designs in a mosaic of coloured stones (Plate LXXIV). Almost the whole external surface is divided into panels of different shapes and sizes, and geometricals in a wide variety of patterns with marvellous combinations are used almost everywhere. They fit as beautifully with arabesques as with jalies (Plate LXXV & LXXVI) and also fit harmoniously into the totality of the facade. Variety is the secret of this art and it is here, more than anywhere else, that this phenomenon is most truthfully depicted.

The western and eastern gateways of this tomb-complex also have geometricals in carved stone. Again they occupy the whole exterior (Plate LXXVII) and again it is variety which saves it from being monotonous or confused. The

72. E.W. Smith (The Moghul Architecture of Fatehpur Sikri, *A.S. I.* New Imperial Series, Vol. XVIII Part III, Allahabad 1897, p. 20) noted that they are composed of interlacing octagons and hexagons. In most of the cases, however, stars of different denominations predominate and they mostly belong to the Star Group. Smith, however, correctly assessed their effect when he noted that some specimens are the finest of perforated marble work to be found in India.

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main tomb, like the south gateway, has these designs in coloured mosaics—around the portal on every side (Plate LXXVIII). Patterns of the Star Group predominate (Plate LXXIX). The uppermost storey is entirely built of white marble and jali-screens are used on all sides. There are 44 marble screens, each having 12 panels, there being thus 528 panels in all. They all have geometric designs of a wide variety. Such a large scale use of geometricals in jalies appears here for the second time after Fatehpur Sikri in Mughal art. The vestibule has some designs in stucco art.

Geometrical patterns are also used at the tomb of Itmad-ud-Daulah on a very large scale in inlay and mosaic. Though arabesques and stylized designs share some of the space, the geometricals form the principal mode of adornment on all the external surfaces (Plate LXXX). Even the upper storey balustrade jalies which have been carved tenderly with extreme refinement have the same set of patterns. The interiors also have these designs in stucco art.

The age of Shah Jehan marks the decline of their popularity. His architect did not seek the assistance of traditional decorators and primarily depended on the architectonic effect. The use of pure ornamentation was minimised. Even when ornaments were employed, the Shahjehanian artist relied on his own scheme of decoration which was largely composed of typically Mughal designs, i.e., some florals combined with stylized motifs. Very little use of geometrical designs has, therefore, been made in his palatial mansions and mosques. The trend of art thus changed from Akbar to Shah Jehan. The former chose to use a geometrical even to crown the western entrance of his palace in the Agra Fort; the latter used a simple design on the pavement of the mortuary hall of the Taj-Mahal at the most. The emphasis obviously shifted from typically Islamic elements to those which had grown in the art of the Mughals itself. This is illustrated by an extremely simple geometrical design which was used at the Chini-ka-Rauza. It is made up of simple straight lines which form an extremely primitive combination like the one at Ajanta (Plate LXXXI).

Geometrical designs may be classified in several groups, according to the particular figure used as the base or the key

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or the chief motif of the design, this classification being the most easily intelligible and workable. The following are a few examples of these groups :

(1) Trigon Group
(2) Square Group
(3) Pentagon Group
(4) Hexagon Group
(5) Octagon Group
(6) Decagon Group
(7) Dodecagon Group
(8) Star Group
(9) Svastika Group.[73]

Thus for example, in a design of the Hexagon Group, a hexagon forms the key of the design, though other figures, e.g., trigons or stars may also be used along with it. Likewise, designs of the Star Group are formed with the star as the principal motif. This star may be 5-pointed at the minimum or 24-pointed at the maximum. Designs of the Svastika Group are formed with the Svastika as the key; it predomniates in the whole pattern and other figures, howesoever varied or several they may be, are used only subsidiarily.

An endless variety of geometrical designs is obtained by using the various figures, i.e., trigons, squares, hexagons, octagons, decagons, or stars, in contact, or by overlapping or super-imposing. Geometrical figures of all conceivable forms in which straight lines never form a right-angle at their junction can thus be worked out into an infinite number of patterns

73. E. H. Hankin's classification of geometrical patterns into four classes (*Cf.* 'On Some Discoveries of the Methods of Design employed in Mohammedan Art', *Journal of the Society of Arts* No. 2730, Vol. LIII, London, March 17, 1905, pp. 461-66 and 'The Drawing of Geometric Patterns in Saracenic Art', *Memoir No. 15 of the A.S.I.*, Calcutta, 1924,pp. 4-23)i.e., in Square, Hexagonal,Octagonal and Arabesque groups is defective. Thousands of patterns have been used in Mughal architecture without square, hexagon and octagon,either individually or collectively and are composed of other figures. Arabesque though based on geometrical principles, like the stalactite, is an altogether different ornament, as has been discussed above and cannot be studied along with purely geometrical designs either formed of straight or curved lines. As a matter of fact, geometrical designs can be devised in endless numbers, under endless varieties and their complete classification is out of question.

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like the combinations in a kaleidoscope.[74] The case is similar with the curved lines.

As a matter of fact, variety is the most distinctive characteristic of the geometrical ornament. It is primarily used for surface decoration to relieve the monotony. If a pattern, however elaborate, is repeated over and over again it tends to produce that effect of monotony that it was intended to prevent. Ingenuity in this respect is a device; in this scheme repetition mars the effect ! This was most sensibly understood by the ornamenters of Fatehpur Sikri, where repetitions are rare. "The artist has nearly worked up to the standard of discarding each pattern as soon as he had used it once. In Birbal's House, for instance, a number of richly decorated pilasters are present in the different rooms. Each pilaster has, on its face fronting the room, three carved panels. On each pilaster the upper and lower of the three panels bear the same pattern, but the middle panel always carries a different pattern, and the patterns used on one pilaster, as I am aware, do not occur on any other. These patterns are nearly all geometrical, but a few are floral, thus further preventing any impression of monotony."[75]

Every surface is not suitable for every design. A geometrical pattern has its own adaptability to a surface. The Mughal artist was a master of the use of geometrical ornament. Thousands of designs, with straight or curved lines, were devised for straight mural surfaces, i.e., for plain panel decoration. An altogether different series of geometrical designs was worked out for use on soffits of arches and domes, on vaults and similar curved, sunk, inclined or projecting surfaces, keeping in view, and skilfully adjusting, the element of perspective. Designs for use on borders were mostly interlacing patterns which could travel from one end to the other in unbroken continuity. This illustrates the lucid ingenuity of the Mughal decorator who intelligently manipulated his design in accordance with the dynamics of the given space; its faithful adaptability to it is the spirit of his art. "That

74. A kaleidoscope is an instrument containing loose bits of coloured glass between two flat plates and two plane mirrors so placed that changes of position of the bits of glass are reflected in an endless variety of patterns.

75. E.H. Hankin, 'On Some Discoveries of the..... ' *op. cit.* p. 470.

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the pattern should be adapted to the space it has to occupy is a truism observed in almost every system of art. In the case of geometrical patterns, this truism admits of a simple geometrical expression, which with rare exceptions, is adhered to by Mohammedan artists....Star-shaped spaces occur at regular intervals.... At the Tomb of Itmad-ud-Daulah there are in marble mosaic hexagonal, octagonal, decagonal and dodecagonal patterns in great profusion but in every panel whatever its size and shape quarter stars are always to be found in each of its four corners.... One is tempted to suspect that the building was designed to fit the patterns."[76] The designs are very judiciously distributed with the most careful calculation of the aesthetic effect. As a matter of fact, the Mughal artist had such a myriad number of geometrical designs at his command that his choice was widely extended and only the best and the most suitable compositions were brought in.[77]

The method of drawing geometrical designs is based on the principle that the sum of the constituent figures of a geometrical design, composed of straight lines, is equal to 4 right-angles.[78] Basic outlines of this ornamentation thus belong to geometry. A great number of hypotheses had been formulated, such as "draw around a circle six equal pentagons" or "assemble around a circle six squares and six regular rectangles." Different types of polygons, regular, symmetrical or irregular, with an equal or unequal number of sides may be used. The diagonals of these figures will determine, by

76. *Ibid.* p. 471.

77. Hankin's statement (*Cf. Ibid.* p. 472) that "The best patterns are those in which all the constituent spaces have either a radical or a bilateral symmetry that is to say, are free from lopsidedness" does not seem to be justified in view of the fact that no design had an inherent effect, it was only with reference to the space it covered and only in the context of its background that its aesthetic merit could be judged. Thus suitability of usage was the guiding principle of the depiction of a geometrical design, not that it appeared marvellous on a drawing.

78. The right-angle value of some geometrical figures is as follows :

Trigon	=	2/3	Square	=	1
Pentagon	=	6/5	Hexagon	=	4/3
Octagon	=	3/2	Decagon	=	8/5
Dodecagon	=	5/3	etc.		

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their intersection, the centre.[79] Any regular polygon can be inserted inside a circle and consequently the sub-division of its surface by lines drawn from the centre is common with the inserted circle. In consequence, the assemblage of the most complex of the polygons can be reduced to two simple problems :-

(i) to divide the circumference into a certain number of parts, and,

(ii) to build a regular polygon one of whose sides is known.[80]

The law of assemblage again comes to the same principle, i.e., the amount of the angles, determined around a certain point by the intersection of two or several lines, is always equal to 4 right-angles. This simple geometrical formula seems to have guided the art of early geometers[81] who used polygons of different forms with this principle in view. Examples of a few designs, worked out by the early Muslim artists may be quoted :

79. Al-Gayet, *op. cit.* p. 93.

80. *Ibid.* p. 94. As for example, three methods are used to compose starry polygons, when in a regular polygon, one draws all the diagonals, they determine, by crossing, one or many starry polygons; when the sides of the polygon are prolonged the intersection of the lines determine the correspondent starry polygons; the starry polygons are determined by the intersection of regular equal polygons. A double consequence follows from this theorem :

(i) from the top of a polygon, one can draw as many diagonals as this polygon has got sides, less three. In consequence, each polygon determines as many starry polygons as it has couples of diagonals drawn from a top;

(ii) when a regular polygon is divided into a certain number of equal parts, and when each top is joined to these points of division, the intersection of the lines determines one or many starry and half-regular polygons.

81. Thus the junction of six equilateral trigons would give the following equation : $2/3 \times 6 = 4$ right-angles, which would be a perfect polygony. The use of three hexagons ($4/3+4/3+4/3=4$ right-angles) would also be perfectly regular. The four essential elements of polygonal ornamentation can be summarised as follows :

(1) The network whose tops mingle with the centre of polygons;

(2) The gathering of elementary polygons;

(3) The tangent circumferences; and,

(4) The different derivated figures, or the starry polygons which determine the meshes of the rose-window drawn into the primitive polygon, Cf. Al-Gayet, *op. cit.* p. 98.

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(1) 2 octagons and 1 square = 3/2+3/2+1 = 4 rightangles
(2) 2 hexagons and 2 trigons+4/3+4/3+2/3+2/3 = 4 rightangles
(3) 2 dodecagons and 1 trigon = 5/3 +5/3+2/3 = 4 rightangles
(4) 1 decagon and 2 pentagons = 8/5 + 6/5 + 6/5 = 4 rightangles
(5) 1 hexagon, 1 trigon and 2 squares = 4/3+ 2/3+2 = 4 rightangles
(6) 1 dodecagon, 1 hexagon and 1 square = 5/3+4/3+1 = 4 rightangles and so on.

According to Al-Gayet,[82] the assemblage of forms has a philosophy of its own. Regular polygons give a sense of clear and precise ideas. Figures which have an equal number of sides reflect calm and grave feelings imprinted with a sweet serenity, while those figures which have an unequal number of sides express a vague melancholy, trouble and the uncertainty which derivates from their lack of symmetry and balance. The interlacing figures formed by intercrossing of lines or by super-imposition of polygons give a sensation of infinity, or deep sadness. The figure drawn from the heptagon gives the impression of a vague and disquieting mystery. This is not entirely a subjective interpretation. A design in fact suggests some abstract impression and the more one is acquainted with and sensitive to the spirit of the art, the more he is able to concretize it.

It is possible that the Mughal artist sometimes used a model template. But it would be wrong to imagine that he imitated the imported designs or those of his predecessors. He himself drew and devised a large number of typically Mughal designs. He used such a vast number of patterns and in such myriad variety at Fatehpur Sikri and Akbar's Tomb that his own ingenious compositions cannot be denied. Some designs are unique and are not met with anywhere else. He had an inexhaustible store of these designs with him, so much so that he used them, not sparingly but profusely, in all decorative schemes, carving and jali-art, mosaic and inlay and stucco and painting. Some of his patterns remain unexcelled by

82. *Cf. op. cit.* pp. 96-98.

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the best Moorish compositions of Spain. A few designs from the Svastika and Star Group may be quoted to illustrate the point. Without doubt, he was as good a geometer as Islam could produce anywhere else in the world and if we go into the details of his endless varieties of presentation, and their sophisticated adaptation to the space upon which they are spread, he was certainly more ingenious, more resourceful.

(e) *Growth and Development of Naturalistic and Stylized Designs in Mughal Art*

The Chevron, Honeysuckle and Palmette (and Knop and Flower), Spiral, Bead and Reel and several other motifs sometimes employed in Mughal art for architectural ornamentation, originally belonged to the West Asiatic stock to which they are as cognate in medieval times as they were in ancient ages, thus leading us to the conviction that art inspirations travelled to far-off regions, and no amount of anarchy, fanaticism or taboos could restrict their area of development and depiction. Though they were used in Mughal Architecture very scantily, for variety, and are never dominant in the ornamental scheme, an appraisal of them is called for in view of their remote and antique inspiration.

The Chevron is a zigzag pattern of straight lines which is generally used, in Mughal architecture, in horizontal courses, on shafts of pillars and pilasters. It came from Persia where it was a traditional design used for architectural ornamentation probably since the time of the Assyrian culture. The Chevron design was used at the Sultana's Palace at Fatehpur Sikri, in carved horizontal and vertical courses in panels and on pillars.[83] The central pillar of the so-called Diwan-i-Khas at Fatehpur Sikri also has the Chevron pattern on its shaft.[84] It was used similarly on the pillars and pilasters of the Eastern porch of the Jehangiri Mahal in Agra Fort and on the pillars of Salim Chishti's Tomb, again at Fatehpur Sikri. It was employed even more markedly on the nook-shafts, and some of the best examples come from the western

83. E. W. Smith, 'Moghul Architecture of Fatehpur Sikri', *op. cit...* Part I, Plate-XXII and XXIV.

84. *Ibid.* Plate-LXXX.

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entrance of the Jehangiri-Mahal of Agra Fort, the portals of the main building of Akbar's tomb at Sikandara and the Eastern gate of the Tomb of Itmad-ud-Daulah. It would be seen that this was favoured originally as an ornament on the shafts of pillars and pilasters but gradually it became the chief motif on the nook-shafts until it was almost replaced by the so-called Rope-pattern, which too came from Persia and which was depicted boldly on the nook-shafts of the main gate of the Taj Mahal.

Many types of spirals are used in Mughal art, chiefly in borders for mural ornamentation. The most prominent is a simple flowing design derived from its Persian counterpart. The Bead-and-reel design was also employed in the borders on the panels, chiefly at Fatehpur Sikri.

The Palmette and Honeysuckle are also ancient motifs. Known as Tāla-parṇa (also called tāla-dhvaja, tālaketu and padmahastaka) and Mucakunda (Pterospermum Suberifolium) in Indian art, they were used in the ancient monuments of India, e.g., on the Toraṇa Gateway of Bharhut,[85] on the abacus of the Asokan pillar at Sāñchi[86] and similarly on the Elephant capital and Bull capital at Sankisa and Rampurva respectively.[87] Both the Honeysuckle and the Palmette are West Mesopotamian art forms, chiefly Assyrian. Both had been used on a large scale by the Egyptians, and then, by the Persepolitans and Greeks. Both seem to be associated with the ancient belief of the 'Tree of Life'. They were used conventionally in Sassanian art, and then in the art of Islam in Persia, and it was from there that these forms were introduced into India. They are generally used together and form a single pattern. It is known as the knop and flower with some variation, chiefly when the Egyptian nymphia takes over the motifs. All these designs were shared in common by West Asiatic cultures from the most ancient times and continued to be depicted on conventional lines in the medieval ages.[88]

85. V. S. Agarwal, *Indian Art* (Varanasi, 1965) Fig. 59.

86. J. Ph. Vogel, *The Goose in Indian Literature and Art* (Leiden, 1962) p. 55.

87. V. S. Agarwal, *loc. cit.* Fig. 46 (b) and (c).

88. G.C.M. Birdwood, *The Industrial Arts of India* (London, 1880) p. 343, "no symbol can approach in beauty of form and meaning to the

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Some examples of the honeysuckle and the knop and flower are met with at Fatehpur Sikri. The honeysuckle is depicted on the apex of an ornamental arch in Birbal's Palace and also in designs in the panels. It is also there on the capital of a pillar in the Panch-Mahal. The Panch-Mahal capitals also have in some cases the Knop and Flower design. The parapet of the Eastern court of the Jehangiri Mahal in Agra Fort is decorated with a honeysuckle design. The pillars and pilasters of its porch have the palmette motif on their bases. The interior decoration of the upper pavilions of this palace is also composed of a honeysuckle and palmette design. The third storey spandrels of the arches of Akbar's tomb at Sikandara have in a number of cases such medallions which contain the honeysuckle motif. The kiosk pillars of the fourth storey have the palmette motif on their bases. All are in carving. Noteworthy is the fact that it was mostly during the age of Akbar, or contiguous to it, that these designs were used. Gradually the Mughal decorators developed their own designs, and by and by these extraneous motifs dropped out.

These designs which grew within Mughal art itself were either naturalistic or stylized. The former are florals used in faithful imitation of nature. They are used on panels, capitals of pillars and, most popularly, on the dado-centres as plants, buds and flowers, leaves, and twigs and branches, in natural form. The latter are vegetational as well as artistic compositions which have been thoroughly conventionalized through constant use. They include stylized involutions, twists, flows, sometimes resembling florals and oblongs, circles and similar compositions suitable for mural decoration.

It may be noted that the ancient Hindus used vegetational designs, chiefly trees, in their naturalistic form and there is rarely any attempt towards stylization. The case is entirely

knop and flower and the Hom of Assyria and purified of all local taint of Asshur...They belong to all the Aryan races in the old world and the new. They are the most ancient badges of the Aryan race, but in India their employment in ornamentation under the influence of Puranic mythology was for ages subordinated to that of the monstrous idol shapes of the Dravidian south; and it was by the Persianised or Arianised Arabs, Afghans and Mongols (Turkomans) that their use was reintroduced as predominant forms in Indian decoration....."

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different with the art of Islam. Even in its earliest monument, viz., The Dome of the Rock, the vegetational motifs like the acanthus and cornucopias are both naturalistic and conventionalized.[89] This is particularly noticeable in the depiction of flowers, "It is a curious fact that although naturalistic fruits abound in the decoration, flowers are always conventionalized."[90] This phenomenon is more obviously perceptible at the Great Mosque of Damascus where vine-creepers and acanthus scrolls are used in conventionalized format. Gradually naturalism gave place to stylized decoration in the art of Islam, in accordance with its spirit.

Both forms of art-motifs, i.e., naturalistic and stylized, are used at Fatehpur Sikri side by side. Thus natural vegetational designs were used on a large scale in the Sultana's Palace at Fatehpur Sikri, chiefly on the pilasters and dados.[91] Examples are also met with on the capitals of the first floor columns of the Panch-Mahal.[92] But the emphasis even in these earliest monuments is laid on the stylized forms. Some of the designs at the Sultana's Palace too are stylized and are given a prominent place in the decorative scheme (Plate LXXXII). The painted designs of the Jami Masjid, composed of vegetational elements, are mostly stylized (Plate LXXXIII). Even when naturalistic representation is liked, stylized forms accompany it as is the case in the painted patterns of the tomb of Salim Chishti (Plate LXXXIV). Some compositions are wholly stylized without any floral basis being perceptible and examples abound in Birbal's[93] and Jodhbai's Palace (Plate LXXXV). These artistic compositions as also those, which are presented in the stucco art in the Treasury and Hakim's House (Plate LXXXVI), constitute the finest stylized forms of Mughal art. Almost similar are the examples of the stylized designs of the tomb of Akbar

89. K.A.C. Creswell, *Early Muslim Architecture*, Vol. I, pp. 154-68.

90. *Ibid*, p. 210.

91. E. W. Smith, Part I, *op. cit.* Plates XXXVI, XLIII, XLIV and XLV.

92. *Ibid.* Plate LIII and LX.

93. E.G. E.W. Smith, Part II, *op. cit.* Plates XII and XIII (brackets); XXIV and XXVII (panels).

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at Sikandara, the art of which derived much of its inspiration from Fatehpur Sikri.

Naturalistic forms, i.e., plants with leaves and flowers, are depicted in painted designs in the interior of the Tomb of Itmad-ud-Daulah. But the attempt of the decorator to stylize the florals is more obviously perceptible here than in earlier monuments. Even in painting highly stylized designs are used (Plate LXXXVII) which appear to have been inspired by the art of jewellery. Almost all the external surfaces have beautiful inlaid designs, which predominate in the art of this tomb, and in almost all these patterns stylized forms have been exclusively employed. Florals are used with artistic compositions (Plate LXXXVIII & LXXXIX). Some forms are unique and their extremely graceful and exquisite effect is not surpassed by any other design of this class anywhere in Islamic art (Plate XC).

Wholly naturalistic florals become the exception after the tomb of Itmad-ud-Daulah, and their use in the buildings of Shah Jehan is extremely rare, the emphasis now being laid wholeheartedly on the stylization of these forms. Even when florals were indispensable, e.g., in the dado-centres of the Taj Mahal (Plate XCI) they are adequately stylized and their natural fabric is lost in its conventional usage. The painted designs of the Mehman-Khana (Plate XCII) and the Masjid of the Taj Mahal are also stylized. The examples at the Chini-ka-Rauza (Plate XCIII) also belong to this class and once again demonstrate the preference of the Mughal decorator for stylized forms of floral motifs.

This aspect of the art of Mughals, thus, reveals some interesting phenomena. It tends towards the stylization of natural florals, or in other words, towards an idealising of the natural motifs. Mere imitation of nature with a realist's approach did not appeal to their taste, and their inclination is inherently towards stylization. This tendency also demonstrates the creativity of Mughal art and its capacity to make its own inventions in accordance with its necessities—and artistic standards. Its aesthetic theme is its own creation and so is its sentimental tone, none of which it borrowed from Persia or even from indigenous art. The element of the sublime, which is the essence of all fine arts, is its own growth and in

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this aspect lies the greatness of this art. It may also be observed in this connection that Islamic art found its best and the finest expression in India under the Grand Mughals. The complete emancipation of the artist from ecclesiastical control or even direction, the unbounded resources of the Empire to finance these projects, the extremely refined taste of its patrons and the fully developed and mature art of the country where it was planted and with which it ultimately synthesised were some of the factors responsible for the exhuberant consummation of this art.

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Chapter III

THE USAGE OF ANIMATE MOTIFS IN MUGHAL ARCHITECTURE

(a) *The Quranic Injunctions against Idolatry* vis-a-vis *Islamic Iconoclasm*

The depiction of animate motifs—birds, beasts, human or celestial beings—constituted the chief mode of the art of ancient Hindus (Jainas, Buddhists and Brahmanicals). Indian art lays stress on the inner meaning (artha) of a work, without which the outer form (rūpa) would be of no consequence, and this inner meaning could be communicated with greater ease and certainty through the use of animate motifs in a wide variety of poses and postures than through such abstract forms as a geometrical design. Not only were the images of gods and goddesses and the sculptures and figures of celestial beings freely used in ancient Indian art, but certain animals and reptiles were also universally adopted as auspicious symbols, e.g., makara (mystical form of crocodile), siṃha (lion), aśva (horse), hastin (elephant), nāga (serpent), garuḍa (legendary bird) and haṃsa (tentatively goose). Some even became vāhanas (vehicles) of the brahmanical deities, e.g., the garuḍa of viṣṇu, and the vṛṣabha (bull) of Śiva, and the symbols of the Jaina tīrthaṅkaras such as the makara of Puṣpadanta, the ninth tīrthaṅkara. Likewise, the Buddha was represented as having been born in various animal forms, such as the haṃsa and hastin for example, in the Jātaka stories which have been so artistically depicted at the Buddhist sites at Sāñchi and Bharhut. A wide variety of vyālas (composite animals) also evolved in Indian art which, as auspicious symbols, were used freely, from the earliest times to the end of the Rajput era.

There was, likewise, no ban whatsoever, on the use of animate motifs in the ancient civilisations of Egypt and Mesopotamia, where living beings were freely depicted. The ancient Greeks sculptured beautiful statues of human beings. Figurative art was used on a very large scale in the early Christian

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underground cemeteries, called catacombs, from the 1st century to the 4th century A.D.[1] The Byzantines adopted the same art in a mosaic of glass.[2]

Azraqi, the oldest historian of Mecca who, died in 858 A.D., specifically mentioned that there were pictures (known as su'war) of Prophets, trees and Angels, on the ceilings, walls and columns of the sanctuary at Ka'ba; the pictures included those of Abraham and of Mary with Jesus on her knee.[3] Not only figural art in the form of paintings but the stone images of gods and goddesses were also in vogue at the Ka'ba before the rise of Islam. The pre-Islamic Arabs freely practised idolatry[4] and a number of chief deities, besides the 360 idols in the Meccan temple, which were in worship, have been mentioned.[5] The Prophet ordered them to be destroyed when he conquered Mecca and gained possession of the Ka'ba in 630 A.D.[6] The Prophet specifically condemned idolatry and explicit references abound in the Quran, e.g., "Lo !

1. G. Carotti, *A History of Art*, Vol. II (London 1909) p. 9, figs. 9-12.
2. *Ibid.* pp. 67-94.
3. K.A.C. Creswell, *Early Muslim Architecture* (Pelican, 1958) p. 2; they were all removed by Muhammad except the one showing Mary and Jesus, which was preserved (for reasons which are yet to be examined) until the Ka'ba was destroyed in 683, *Cf. ibid.* p. 97.
4. Arabic 'shirk' (hence idolator was called 'mushrik'. The images were called 'waṣan' (plural 'aūṣan') and idols 'sanam' (plural 'aṣnām') in Arabic.
5. T.P. Hughes, *A Dictionary of Islam* (London, 1885) pp. 190-92, the ten famous deities which are mentioned in the Quran in different Suras were : (1) Al-Jibt (2) at-Tāghūt (3) Al-Lāt (4) Al-'Uzza (5) Manāt (6) Wadd (7) Suwa (8) Yaghus (9) Yāūq (10) Nasr. (Some were shaped as animals). Other minor deities were Hubal (Hobal), an image of a man said to have been originally brought from Syria, Isāf an idol on Mount aṣ-Ṣāfā and Nāilah, an image on Mount al-Marwah, *Cf. ibid.* p. 192.
6. Hajaru'l-Aswad or the Black Stone from Heaven which was an object, as it still is, of idolatrous worship, was retained. Hughes describes the basic difficulties of the great socio-religious reformer in the following words : "These narratives of al-Tabari and the secretary of al-Wāqidi are fully borne out in the facts of Muhammad's subsequent compromise with the idolatrous feelings of the people; for whilst he removed the images from the Kabah, he at the same time retained the black stone as an object of superstitious reverence, and although he destroyed Isāf and Nāilah, the deities of aṣ-Ṣafā and al-Marwah, he still retained the 'runnings to and fro' and the 'stonnings of the pillars' as part of the sacred rites of what was

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Abraham said to his father Azar : 'Takest thou idols for gods ? For I see thee and thy people in manifest error.' "[7] His objection seems to have been levelled against the worship of the idols along with God, because He is one and the only God 'Lā illāhā illillāh' and no other object or person can share the adoration and worship of mankind. The Prophet made this point clear in the Quran in several passages, e.g., "Take not with God another object of worship; or thou (O man !) wilt sit in disgrace and destitution" and "Thy Lord hath decreed that ye worship none but Him...."[8]

This was thus the proscription of that idolatry which was in practice at Kaba at the time of the inception of Islam. It was a religious injunction, pure and simple, laid down against a superstitious ritual which grossly violated the idea of the Unity of Being which formed the very foundation of his religion. What the Prophet ordained was not a general ban on the representation of living beings—birds, animals and human beings—but the prohibition of idol-worship which was fundamentally opposed to the creed of Islam. That the rule was of a socio-religious reformatory nature and not one of philosophical dogma which could have wide, general implications and could be interpreted at the convenience of the Commentator, is brought out by yet another verse of the Quran, "O Believer ! Wine, games of chance and idols are abominations invented by Satan; abstain from them and you will be happy."[9]

intended to be a purely theistic and iconoclastic system. The most singular feature in the fetishism of Arabia was the adoration paid to unshapen stones, and Muhammad found it impossible to construct his religion without some compromise with the popular form of idolatry. It is a curious circumstance that so much of the zeal and bigotry of the Wahhabi puritans is directed against the shirk, or idolatry, of the popular veneration for tombs and other objects of adoration, and yet they see no objection to the adoration of the black stone, and those other strange and peculiar customs which form part of the rites of the Makkan pilgrimage," *Cf. ibid.* p. 191.

7. Sura VI, Verse 74, *Cf.* Abdullah Yusufali, *The Holy Quran*, Vol. I (Lahore, 1937) p. 309.

8. Sura XVIII, 22-23, *Cf. ibid.* Vol. II, p. 700.

9. Al-Gayet, *L'Art Arabe*, (Paris, 1893, French ed.) p. 56 : "O Croyant : le vin, les jeux de hasard et les idoles sont des abominations, inventees par Satan; abstenez—vous—en et vous serez heureux."

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The Hadith,[10] on the other hand, lays down, "Woe to him who would depict a living being ! On the day of the Last Judgement the people he has depicted will leave the tomb to join him to demand of him a soul. Then that man, powerless to give life to his work, will burn in the eternal fires."[11] And, "God has sent me against three sorts of people, to annihilate and confound them. They are the proud, the polytheists, and the idolaters. See that you do not make representations, whether it be of the Lord, or of man, and paint only trees, flowers and inanimate objects."[12]

This commentary, manifestly, is not in consonance with the letter and the spirit of the Prophet's injunction. It proscribes not only idolatry, but also bans the representation of living beings in secular as well as in religious sphere, which the great socio-religious reformer probably never said or meant to say. This is an exaggerated version of his simple condemnation of the idols which were worshipped as gods and goddesses by the Pagan Arabs in utter ignorance.

It may be mentioned that when Ctesiphon was captured in 637 its great iwan was used for Friday prayers but the frescoes which were painted on its walls were not removed. We do not hear anything definite in this reference which could be said to have established hostility to animate motifs in the 7th century A.D. Chronologically these iconoclastic views were first expressed by the Omayyad Caliph Omar II (717-20)

10. Two laws rule the Muslim world, the Sunnah or the written law given by the Prophet, i.e., the Quran and the Hadith or traditions. The Hadith is a repository of opinions expressed by the Prophet and preserved by his followers.

11. Al-Gayet, *op. cit.* p. 56; Creswell, *Cf. op. cit.* gives this slightly differently, "On the day of Judgement the punishment of hell will be meted out to the painter and he will be called upon to breathe life into the forms he has fashioned but he cannot breathe life into anything." The idea however remains the same. Creswell supports it from Bukhari, Juynboll's ed. II p. 41 and IV, p. 106.

12. Al-Gayet, p. 56; an explicit command to destroy pictures and images was given in another instance : "Abul Haiyaj al-Asadi relates that the Khalifah Ali said to him : 'Shall I not give you the orders which the Prophet gave me, namely, to destroy all pictures and images, and not to leave a single lofty tomb without lowering it within a span from the ground' " (Mishkat, Book V, Ch. VI, Part I). *Cf.* E. W. Smith, *The Moghul Architecture of Fatepur Sikri*, Part III, *A.S.I.* New Imperial Series, Vol. XVIII (Allahabad, 1897) p. 27.

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in his correspondence with the Byzantine Emperor Leo III.[13] This intolerance was inherited by his successor Yazid II (720-24). He ordered the destructiou of "every representational painting, whether on tablets or in wall mosaics, or on sacred vessels, and altar coverings, and all such objects as are found in all Christian churches ... and so also all representations of any kind whatever that adorn and embellish the market places of the cities ... ."[14]

The edict, even yet, does not seem to have been of much consequence, indeed John, Patriarch of Damascus and a great opponent of the Iconoclasts (c.700-750), is silent about this hostility.[15] Although he vehemently wrote against Islam, "he never accuses the Muslims of being hostile to pictures, although it would have been the first thing he would have seized upon to reproach them with had they held such opinions."[16] Such instances are found about the end of the 8th century, e.g., in the writings of Theodore Abu Qurra, Bishop of Harran,[17] and as it appears the theological ban on the representation of animate objects in painting and other arts came into practice only towards the end of the 8th century A.D.[18]

It is interesting to study how the idea of a general prohibition of animation which is so characteristic of Islamic Art developed. The Hebrew people were the first to place a ban on image-making,[19] much earlier than the birth of Islam. Here too the

13. A Jeffrey, The Harvard Theological Review, 37, 1944, pp. 269-332, *Cf.* R. A. Jairazbhoy, *Art and Cities of Islam*, (New York, 1964) p. 38. He also quotes from the following works in this context : P. J. Alexander, *The Patriarch Nicephorus of Constantinople*, 1958 (pp. 6-7, 233-34); E. J. Martin, *A History of the Iconoclastic Controversy*, 1930; J. Starr, An Iconodulic Legend and its Historical Basis, *Speculum* VIII, 1933 (pp. 500-503); A. A. Vasiliev, *Oaks Papers*, Nos. 9, 10, 1956 (pp. 25-47).

14. Jairazbhoy, *op. cit.* pp. 38-39.

15. Creswell, *op. cit.* p. 98.

16. *Ibid* p. 98.

17. *Ibid.* p. 98.

18. K.A.C. Creswell, *Cf. Encyclopaedia of Islam*, Vol. I (1960 ed.) p. 612 : "Painting, contrary to the popular idea, is not forbidden by any passage in Quran, and hostility to it only took proper theological form towards the end of the 8th century A.D." (also see his article 'Lawfulness of Painting in Early Islam' in *Ars Islamica*, XI-XII, pp. 159-66) .

19. Jairazbhoy, *op. cit.* p. 36 : "The Second Hebrew Commandment prohibited the making of 'any manner of likeness of anything that is in

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objection was directed only against the use of idols, as the general representation of cherubim, lions, bulls and men continued in the Jewish temple.[20] The Biblical subjects were also portrayed in mosaic pavements and frescoes,[21] in sectarian buildings. The ban was, thus, exclusively against idolatry, which was intended to raise the faithful from the oblivion of ignorance and superstition to the realisation of the Supreme God.

Early Christian theologians like Tertullian (160-240), Origen (185-255) and Eusebius condemned image-worship,[22] but not the protrayal of animate objects. The spirit of the Jewish and the Christian proscription is thus identical with that of the Quran which also forbade the use of idols[23] for religious worship. As it seems, no pre-Islamic Prophet, Saint or philosopher ever cast restrictions of this nature on secular art. There was, thus no external influence which could be held responsible for the growth of the iconoclastic zeal in Islam, which, in all probability, gradually developed in itself as a natural reaction of the simple Arab spirit against the magnificent cultures of the regions they subjugated by the sheer force of arms.[24] The Arabs pre-

heaven above and that is in the earth beneath..... !" (Deut, V.'; Exodus, XX. 4); "You shall make you no idols nor graven image" (Lev. XXVI.1).

20. *Ibid.* p. 36 supported from Exodus XXV.18; Ezekiel.XLI.18f.

21. J. Leveen, *The Hebrew Bible in Art*, 1944, p. 62f, vide J.B. Frey, 'La question des images chez les Juifs', Biblica, Rome, XV, 1934, pp. 298-99, *Cf. Ibid.* p. 36.

22. Dictionary of Sects, Heresies..... (ed. J. H. Blunt,1874) 'Iconoclasts' pp. 215-21 *Cf. Ibid.* p. 37; Al-Gayet, *op. cit.* p. 57.

23. Ibn al Kalbi (*The Book of Idols*, tr. N. A. Faris, 1952, p. 46, *Cf.* Jairazbhoy, *op. cit.* p. 37) discriminates (as late as in the 9th century) between 'sanam' and 'wasan'; according to his version 'aṣnām' (idols) were banned, not 'auṣān' (images).

24. Al-Gayet (*Cf. op. cit.* p.183) ascribed it to the monophysite inheritance and the materialism of Greek art, but this thesis does not appear convincing. Creswell's view (*Cf. Early Muslim Architecture, op. cit.* p. 98) that the feeling arose partly due to the inherent temperamental dislike of Semitic races for human representations and partly due to the internal effect of the Jews who had been converted to Islam is more to the point. His observation, however, that superstition might also have played an important part in shaping the ban is superfluous. Superstition did not lead to a prohibition of figures, on the other hand, it helped to retain them, as we see in the form of Talismans.

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ferred pure ideas to concrete forms, and floating impressions to imitations, and it is only this way that we can explain their extraordinary love for abstract geometricals, arabesques, stalactites and of course calligraphic depictions, to the exclusion of many conventional Coptic and Sassanian features. The antagonism was intended indirectly to preserve the simplicity, sobriety and pristine purity of Islam, and to maintain that spirit of artlessness which had prevailed with the Umayyids and which had been abandoned by the Abbasids after their capture of power in 750 A.D. The capital had been transferred from Damascus to Baghdad and with this change Persian influence became preponderant. The Hadith proscription of the depiction of animate forms seems to have been directed mainly at keeping this influence in check. That the "prohibition against painting did not exist in early Islam but that it grew up gradually towards the end of the eighth century" was not a coincidence but the result of a well-calculated policy which drew its inspiration more from temporal considerations rather than from ecclesiastical.

J. Sourdel Thomine[25] rightly observed, "Indeed it is this deliberate impoverishment of the plastic imagination, with its aniconic tendency, which most frequently comes to mind when one attempts to define the basic originality of Islamic art, whether the emphasis is put on the abstract character of the surface ornamentation which it uses in such profusion, or whether this characteristic is more precisely related with the religious prohibitions peculiar to Islamic doctrine or with a system of theologico-philosophic opinions which dwells on the illusory and precarious character of the visible world as contrasted with God who alone endures. This may be a somewhat simplified view of a very complex problem, all the more, since the exclusion of images was not observed with the same rigour in every region or period; to deny this would be to ignore some of the most beautiful Muslim achievements, starting with those of the schools of illuminators who were well able to portray or transpose with delicate touch the scenes which surrounded them. Yet one should not disregard the large share of truth which such an axiom contains."

25. *Cf. Encyclopaedia of Islam*, Vol. II (1965 ed.) p. 777.

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Abu Ali Farisi, as late as the 10th century, maintained that the Islamic injunction "to the effect that the makers of images will be chastised on the day of the Final Reckoning refers only to those who represent God in a bodily form,"[26] and there is nothing religiously objectionable in fashioning non-religious subjects. This view expressed in the 10th century A.D. shows the efficacy and application of the Hadith proscription. It was never followed in general and in toto and the idea developed only gradually and sparsely—very sparsely indeed. Animate motifs continued to be depicted in secular as well as ecclesiastical buildings of Islam, and, except in India during the Sultanate period (1206-1526 A.D.) the rigours of theological hostility to such representations were never felt in any country or in any age. This is more than confirmed by a study of a few illustrative examples.

(b) *Animation in Islamic Architecture*

The fresco-paintings of Qusayr 'Amra (712-15 A.D.), situated some 50 miles east of Amman depict figurative subjects, men, women and hunting scenes.[27] Birds and beasts, e.g., the snake, ass, deer, monkey, stork and camel are freely shown.[28] The palace of Qasral-Hair (728) has a wall painting showing musicians and huntsman.[29] The famous Ummayyid palace of Walid II's reign (743-44) at Mshatta has a profusely decorated facade in carved marble. The upright and inverted triangles contain vine-stalks, bunch of grapes and rosettes. Birds appear plucking at the grapes and pairs of lions facing each other.[30] Some triangles have a chalice out of which two animals drink.[31]

The palace of Khirbat al-Mafjah (743) has figural composi-

26. Jairauchoy, p. 27 (Cf. Bishr Fares *Essai sur l'esprit de la decoration Islamique*, 1952, p. 25 and G. Wiet, *Syric*, XXX, 1953, p. 342).

27. K.A. Creswell, *Early Muslim Architecture*, (Pelican, 1958) pp. 87, 89, A. H. C. Christie, (*Cf. The Legacy of Islam*, Oxford, 1931, p. 110) designates it as a scular court art, of mixed Hellenistic and oriental tradition. His view, (*Cf. ibid.* p. 112) that representation of human and living beings was forbidden but in secular Muslim art such ornament is commonly found, however, needs revision.

28. Creswell, *Op. cit.* p. 95.

29. D.T. Rice, *Islamic Art*, (London, 1965) p. 24, Fig. 17.

30. *Ibid.* p. 20; Creswell, *op. cit.* pp. 131-34, Plate-29.

31. *The Encyclopaedia of Islam*, Vol. I (1960 ed.) p. 615.

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tions in painted plaster;[32] one shows a tree with animals beneath its branches (Plate XCIV). The wall paintings of the rooms have motifs comprising both formal decorative patterns and figures of living beings. It can thus be noted with little doubt that living beings were freely depicted in the Ommayyid Architecture without a theological prohibition.[33]

Wall paintings were also there in the harem of the Jausaq Palace of Samarra, built by the Abbasid Caliph al-Mutasim (833-41).[34] "Most impressive was a great scroll enclosing birds and animals. Birds and animals were also shown individually, usually within medallions adorned with dots representing pearls (Fig. 8) a favourite Sassanian motif frequently used for textiles. There were also large figures of nereids and dancing girls....."[35]

The walls of the houses at Nishapur in Khorasan, which was once the capital of the Samanids (874-999) were decorated with paintings which, included besides vegetational motifs, animal subjects.[36] The representation of living beings was not confined to Suria and Iran; unmistakable examples come from Egypt, Spain and other Saracenic regions. A wall painting from a bath near Cairo (11th century A.D.) shows figural art.[37] Animal motifs were used, more than often in the Fatimid art of Egypt (ranging between 973 and 1171 A.D.) in monuments as well as in handicrafts.[38]

Al-Gayet describes[39] the friezes of Maristan which depict living beings. A crowned centaur chases a gazelle through a forest of inextricable creepers. Musicians are seated on a bed of greenery; one tunes his theorbe; the other ties his cymbals

32. Rice, *op. cit.* p. 22.

33. Creswell, *op. cit.*, p. 158.

34. *Ibid.* p. 265, Fig. 54; Rice, *op. cit.* p. 33, Fig. 23.

35. Rice, p. 33; *The Encyclopaedia of Islam*, Vol. I, *op. cit.* p. 620; Sir Mortimer Wheeler, *Splendours of the East*, p. 32.

36. Rice, p. 51.

37. *Ibid.* p. 85, Fig. 83.

38. G. Marcais, *The Encyclopaedia of Islam*, Vol. II, (1965 ed.) p. 864, supported from al-Makrizi, *Khitat*, I, 416, 472, 477.

39. *Cf. op. cit.* p. 188. He quotes numerous other examples of this class, of the Gate of Beibars, Kasr-er-Redouan, El-Metoualli and other places, *Cf. Ibid.* pp. 188-94.

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to his fingers. Peacocks flutter and perch on the branches of the creepers. Elsewhere dancers advance towards each other shaking tambourines. The Court of Lions in the Alhambra at Granada in Spain, as its very nomenclature indicates, owes its world-wide fame to the lion-fountain in the centre which was added in 1354.[40]

Baghdad, which was the seat of the Caliph (Darul Khilafat) and the metropolis of Islam from the transfer of the capital in 750 to its sack by Hulagu in 1258, contained beautiful baths, houses and gardens. Some accounts record that inscriptions and drawings of animals and human beings were used ornamentally at the entrances.[41] It is noteworthy that such representations aroused no objection or suspicion, much less a resentment, at this centre of orthodoxy and seems to have been made in the usual course. The details of the decoration above the archway of the Talisman Gate at Baghdad (built in 1221) which formed part of the fortifications, showed a pair of winged dragon-serpents and a human figure sitting cross-legged between the dragons (Plate XCV). The dragons and the figure have apparent Chinese influence, while the sitting posture and the mode of depiction is Indian. This survived all vicissitudes until it was blown up in 1917.

Timur's contemporary Ibn 'Arab-Shah mentions that Timur adorned the walls of his palaces at Samarqand with pictures whose subjects, according to another contemporary, the Spanish traveller Clavijo, were the same as those in the contemporary miniatures.[42] That such depictions were not offending to the orthodox eye in Samarqand in the 14th century, as they were not in Baghdad in the 13th, is an important point in this context. Another illustrative example of animate decoration at Samarqand is on the central arch of the facade of a 15th century Madrasah at Reghistan. Tigers and deer in glazed-tiles are shown in the spandrels, while two human faces peep over them.[43]

40. Rice, *op. cit.* p. 153, Fig. 150.
41. *The Encyclopaedia of Islam*, Vol. I (1960 ed.) p. 899, supported from J. Mudawwar, Hazarat-al Islam p. 29; Abul Kasim, 7, 36, etc.
42. Andre Godard, *Iran*, (Unesco ed.) Introduction, p. 15.
43. Jacquetta Hawkes, *Splendours of the East*, p. 66.

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(c) *Animation in Handicrafts and Miniature-Painting*

Animate motifs were used freely on Islamic pottery, faience, glass, bronze, ivory, wood, textiles, carpets and other handicrafts, as it appears from a vast number of these articles which have been found in Iran, Syria and Egypt.[44] No objection seems to have been made by the artisans who produced them or by the patrons for whose purpose and purchase these articles were produced. The general circulation of these motifs, as much as their popular use, tends to indicate that there was no orthodox injunction of any practical utility in force, against the representation of living beings, even at the most orthodox centres of the Islamic world.

The Caliphs had their portraits drawn and preserved.[45] Baghdad had its gallery of sovereigns. Khomarouyah, son of Touloun, had his portrait and that of his wives. in the gardens of Kotayeh.[46] In some instances, statues were also made, and were clothed with magnificent materials, sparkling with precious stones.[47]

The point can be elucidated with greater elaboration with respect to miniature painting. These paintings which illustrated manuscript copies mostly come from Iran[48] and Syria and freely depict figural art. They are works of history, poetry (epics), fiction, medicine and religion. Unmindful of any consideration except that of a beautiful production of art, these miniature paintings depict the subjects of the manuscript, men, women and animals, in a wide variety of scenes and moods.[49]

How far the ban on the representation of living beings, if at all it was proclaimed and assumed the nature of a 'fatwa', was ineffective, almost to the point of being a dead letter, is amply demonstrated by yet another aspect of miniature-painting. The Miraj-Nama contained a number of miniatures in which the life of Muhammad, the Prophet himself, was depicted in various phases and features. The paintings were done in 1436 at Herat under the patronage of Shah Rukh, the eldest son of Timur. One painting shows the Prophet ascending to heaven

44. See Appendix—'C' for a list of some representative examples.
45. Al-Gayet, *op. cit.* p. 184.
46. *Ibid.* p. 184.
47. *Ibid.* p. 184.
48. *Ibid.* p. 57.
49. This material is widely available and hardly requires an illustration.

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on the fabulous animal Buraq (Plate XCVI). Though the liberal Shia outlook towards animation was responsible for this bold innovation, curiously it did not receive condemnation or even a mild reproach from the most orthodox sections of the Islamic world. The idea was generally tolerated, if not initiated. This brings home with unmistakable distinctness the fundamental weakness of the injunction against the representation of figural art and presents it merely as a theoretical formula.

(d) *Animate 'Tughras'*

An equally interesting aspect of animation is the art of the 'tughras' (or the animal figures formed by Arabic letters, mainly verses from the Quran) with which pious Muhammedans used to decorate their walls in place of pictures. In this connection, T.H. Hendley refers[50] to a book of Michelangelo Lanci entitled '*Trattato delle Simboliche Rappresentanze Arabische*' (1845) and notes, "In plates 63 and 64 there are two illustrations of birds and one of a lion made up of such letters and a fourth of Burak, the fabulous animal on which Mohammed is said to have ascended to heaven."[51] Noteworthy is the fact that the letters of the meaningful verse are wonderfully adapted to the form of the bird or animal which as a matter of fact does not exist; what we see is a verse though we find it designed in the form of a bird or animal ! The use of 'tughras' seems to have been generally approved and the art gradually became an important branch of calligraphy. "For pious Mohammedans it has long been a practice of oriental penmen, who are often artists, to weave the fine forms of Persian letters into the outlines of animals and birds.... (the illustrated Buraq) contains a whole litany of prayers. The piety of the inscriptions covers the profanity of the picture. The illustration is in the form of a horse with the crowned head of a human being, with wings or the shoulders of the animal."[52]

50. *Cf. The Journal of Indian Art*, Vol. XVI, No. 122-128 (London, October 1914) p. 31.

51. *Ibid.*, p. 31. It may be noted that 'Tughra' was originally a Cipher or Calligraphic emblem which was placed by early Muslim rulers on firmans, title-deeds, coins and monuments.

52. T. H. Hendley, *The Journal of Indian Art*. Vol. XV. No. 120 (January, 1913) p. 79 as quoted from J.L. Kipling's 'Beast and Man in India'

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The statement that "the piety of the inscriptions cover the profanity of the picture" needs examination. Why was the inscription written pictorially at all if the picture was considered to be so notoriously profane as to require a covering ? The truth seems to be otherwise. The calligrapher, as it seems, vied with the painter and in his attempt to outdo him he devised the 'tughra' art, without losing the religious merit of which the painter had none. For him (the calligrapher) it was an attractive offshoot of his art; for the orthodox musalman it became, as it tends to show, a safety valve.

(e) *Talismans*

The Muhammedans used Talismans (drawings and sculptures of symbolic demons and animals) in their monuments to ward off evil spirits. They seem to have borrowed the superstition from the ancient civilisations of Mesopotamia. Such animals were used as early as in the 2nd millennium B.C. at Ur to guard houses.[53] Fierce-looking animals, sometimes having human-heads, were usually placed outside the Assyrian palaces.[54]

The Muslims inherited the belief. Though these talismans, as they were called, had animal forms they were used as warders on a very large scale in their monuments. Ibn Shaddad wrote about 1280 that two copper jinns were used in the tower of the Water-Gate at Harran to serve as talismans against snakes. Serpents, in faithful imitation of their animal form, were represented on the mausoleum of Imam Bahir in Mosul (c. 1250 A.D.).[55] The practice seems to have reached Egypt in the early centuries of Islam. The Fatimid mosque of al-Azhar (972) in Cairo had a talisman in the shape of birds which were placed on the top of three columns.[56] That these living forms were used in the mosque of al-Azhar which was the very seat

53. R.A. Jairazbhoy, *Art and Cities of Islam*, *op.cit.* pp. 22-23.

54. *Ibid.* p. 24, "Asarhaddon expressly says that he placed Sedus and Lamassus to the right and left of doorway in order to 'turn back the breast of the evil one," Also known as HAMAIL, a Talisman is technically an inscription with astrological and other magical signs, or an object covered with such inscriptions, also with figures from the Zodiacal circle or the constellations and animals which were used as magic charms to protect, and avert the evil eye.

55. *Ibid.* p. 25.

56. *Ibid.* p. 28.

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of orthodoxy in the Muslim world is an interesting phenomenon. It shows that there was never a total ban on the forms and figures of living beings, which were tolerated far and wide as long as this depiction suited the convenience, taste or belief of the people.

(f) *Animation in Mosques*

The theory that the representation of living beings was confined to secular art is only partially true. Sectarian buildings, including, of course, mosques, also contained such decoration.[57] Other illustrative examples, besides the mosque of al-Azhar, may be cited. The Qibla of a mosque at Mosul of the 12th century A.D. has sculptured decoration in gypsum alabaster. Around the mihrab, on all the three sides human figures are depicted in one continuous series, each in a panel. This can be compared with the facade of the Maitreya niche in Cave XIX at Ajanta (500-500 A.D.), with adequate similarity. Mosul being a region which was largely, originally, under Buddhist influence,[58] this sort of decoration seems to have been inspired by Indian art. The point is not so much, however, the extent of an inspiration, as the acceptance of a Hindu formula in a Muslim mosque, and that too so liberally and so unbiasedly !

The great gate of the mosque of Kalaoun, now in the Arab Museum in Cairo is divided into panels of arabesques. Human torsos emerge here and there from the foliage; the trunks attach themselves in the guise of arms to their shoulders and curve over their brows. In the foliage antelopes and gazelles rise up, pass and disappear as it seems from a distance.[59]

57. D.T. Rice's observation that "the fact that no figures whatsoever are included in the mosaics either of the Dome of the Rock or at Damascus does suggest that in mosques the dictum was already in force by about 690" (*Cf. op. cit.* p. 18), is not correct. K.A.C. Creswell explicitly mentions the use of Cherubim (winged motifs, resembling the Sassanian motif) among the decorative motifs of the Dome of the Rock (*Cf. Early Muslim Architecture*, Vol. I (Oxford, 1932) p. 198).

58. Al-Biruni almost contemporarily recroded, "In former times, Khurasan, Persia, Irak, Mosul, the country upto the frontier of Syria was Buddhistic." *Cf.* E.C. Sachau, *Alberuni's India*, (Delhi, 1964) p. 21.

59. Al-Gayet, *op. cit.* pp. 186-87.

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(g) *Canonic Orthodoxy in India During the Sultanate Period*

It is a curious paradox of the history of Islam that every theoretical formula which the theologians had tried to impose in vain in the countries of Islam became a rule in general practice in India during the entire Sultanate period (1206-1526). The State under the Sultans of Delhi was theocratic. Religious fanaticism was not an exception, it was a characteristic trait of this state. The orthodox point of view reigned supreme and Canon Law guided the destiny of millions of people who had been brought within the subjugation of the Turkish Empire.

Pure and simple, it was a negative fanaticism of the Ulema, who posed as not only the interpreters of Law and the pundits of religion, but also the grandees of the Muslim State, pretending to look after its inherent interests. They prescribed a series of 'nots' which the individual was commanded to observe and, in the case of his negligence, the State to enforce. Thus, believers were directed not to drink wine, or to take recourse to dancing or music, or painting or sculpture, not to spend lavishly on dress and food, not to use gold brocades or costly silks or ornamented articles or gold or silver vases, not to build tombs or magnificent buildings. The Zimmis or the non-believers who were allowed to remain in the Islamic state in lieu of the payment of Jaziya, were commanded not to build temples or to repair old ones, not to observe their religious rites publicly, not to ride good horses or wear good dresses, not to carry arms and not to do anything which might cast aspersions on the true faith. Their's was not a positive approach to art, much less to religion, and the rigours of a set of rigid theological proscriptions were felt in the private life of the citizen of the Delhi Sultanate.

Consequently, while we generally hear of wars and conquests, the demolition of temples and desecration of idols, the burning of villages and the massacre of the population, the collection of the Jaziya and the ruthless imposition of many a fanatical measure during the Sultanate period, activity in the sphere of fine arts is rare and exceptional. We hear little of miniature painting. Music is so rigidly banned that the musical practices of such a popular saint as Nizamuddin Auliya of Delhi did not fail to invite the hostility of Ghiyasuddin Tughlaq, (1320-25) the ruling monarch. The depiction of animate

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motifs was totally prohibited in arts as well as in architecture and we do not come across a single example, which could be cited even as an exception.

Off and on, we hear of the severity with which the theological ban was enforced by the State in India. Firoz Tughlaq (1351-88) in his 'Futuhat-i-Firozshahi' thanks God for "His impulse for the maintenance of the laws of His religion, for the repression of heresy, the prevention of crime, and the prohibition of things forbidden; who gave me also a disposition for discharging my lawful duties and my moral obligations...."[60] In his 15th edict, he records, with a feeling of great religious merit, having removed the pictures, "In former times it had been the custom to wear ornamented garments, and men received robes as tokens of honour from King's courts. Figures and devices were painted and displayed on saddles, bridles, and collars, on censers, on goblets and cups and flagons on dishes and ewers, in tents, on curtains and on chairs and upon all articles and utensils. Under Divine guidance[61] and favour I ordered all pictures and portraits to be removed from these things, and that such articles only should be made as are approved and recognized by the Law. Those pictures and portraits which were painted on the doors and walls of palaces I ordered to be effaced."[62]

Sikander Lodi (1487-1517) who was also, like Firoz Tughlaq, the son of a Hindu mother,[63] did everything possible within his might to prove his whole-hearted devotion to the orthodox injunctions of Islam. He took up the work of systematically eliminating infidelity from the 'Darul-Islam' as was the Delhi

60. *Cf.* Elliot & Dowson, *History of India as told by its own Historians*, Vol. III, pp. 374-75.

61. The Ulemas would make Firoz believe that this he did under Divine guidance ! as an act of great religious merit. This brings home adequately the guidance which was accorded by the relgious jurists to the State and religious fanaticism which loomed large at the hands of the Delhi Sultans.

62. *Cf.* Elliot & Dowson, *op. cit.* p. 382.

63. Fanaticism seems to have been a characteristic trait of the behaviour of those sultans, emperors and umaras of India who were either born of Hindu mothers or were otherwise related to Hindus by blood or were Hindu converts. The examples of Firoz Tughlaq, Sikandar Lodi and Aurangzib are more than sufficient to illustrate the point. Did they try to prove their worthiness for Islam this way—in the eyes of their brethren ?

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Sultanate in his estimation. He demolished Hindu temples, collected jaziya and rigidly imposed restrictions on their religious practice to coerce them into conversion. It is noteworthy that Bodhan, a poor Brahman of Oudh, was beheaded at his command because the former had declared Hinduism to be as good and as true a religion as was Islam, which was, the Qazis who tried him declared, an open outrage. The depiction of animation during his rule was thus inconceivable in applied art.

(h) *The Advent of Babur and the Dawn of an Era*

The first battle of Panipat (1526) not only brought about a change in the political set-up, it also introduced new cultural trends in India. The dark age, as the historians have tended to call the Sultanate period (1206-1526), closed, and a new era of broad vision and enlightened outlook opened. Babur brought with him a love of poetry, music and other arts and, of course, wine. He had none of those characteristics which marked a Sultan of Delhi. He never sought advice from the 'Ulema and was his own master and his own Emperor.[64]

Babur's liberal outlook is amply brought out in the instructions which he is said to have given to Humayun on the eve of his Indian expedition, "O, my son, People of diverse religions inhabit India....it therefore, behoves you that....you should not allow religious prejudice to influence your mind, and administer impartial justice, having regard to the religious susceptibilities and religious customs of all sections of the people. You should in particular refrain from the slaughter of cows.. you should never destroy places of worship of any community.. the propagation of Islam will be better carried on with the faith of love and obligation than with the sword of suppression.'[65]

64. M. L. Roychoudhury (*Cf. The Din-i-Ilahi*, Calcutta, 1941, pp. 42-43) describes the legacy which Babur inherited, "a spirit of cultural eclecticism, almost unfettered by the limitations of Islam, though they had accepted it 150 years before, existed in the two great houses of central Asia from which the Chogtai family of India traced their descent. They continued their old social system, with love Shamanic customs, their love for literature and literary men, with their cruel propensities and disregard of human lives. The Torah of Chengiz Khan was still quoted, and when necessary, put into practice."

65. *Ibid.* p. 47.

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Babur did not object to the rows of haṃsa and makara, when he visited the Man-Mandir of Gwalior in 1527. This toleration is representative of the inherent aesthetic sense of the founder of the Mughal dynasty. While his accounts regarding Agra are full of dejection and disappointment, he enthusiastically appreciates the artistic peculiarities of the Man-Mandir.[66] He called it a singularly beautiful palace, lofty and splendid. He observed that the outside of the walls had been inalid with green tiles. In the tower of the eastern division was the Hati-Pol, or the Elephant-Gate. Babur noted that on the outside of this gate was the figure of an elephant having two elephant-drivers (or riders) on it and that it was the perfect resemblance of an elephant. He did not at all condemn these stone sculptures.

Babur ordered the nude figures of the Jaina Tīrthaṅkaras in the Urwahi valley of the fort of Gwalior to be mutilated not because he objected to the representation of living forms but because he considered it to be an indecent art. He observed, "These idols are shewn quite naked without covering for the privities....Urwa is not a bad place; it is shut in; the idols are its defect; I for my part ordered them destroyed."[67] Babur thus took this as an outrage to art, rather than to religion.

The first half of the 16th century was a period of great intellectual activity. A fusion of two cultures was rapidly taking place as a result of the Bhakti movement, which was then at its zenith. The Hindu element had become a permanent factor not only in Muslim administration but it also left a wide imprint on the social life of the ruling class. Many Hindu beliefs were accepted by the Muhammedans. Hindu astrology, divination and saint-worship and Yogic practice were belived in by them. Humayun is said to have fashioned his audience-hall according to the Hindu custom : it had seven rooms named according to the seven stars, e.g., the Moon-chamber for poets, travellers and ambassadors; the Mars-chamber for religious law-givers and administrators; the Mercury-chamber for warriors and soldiers.[68] He freely mixed with Shias and Sufis.

66. *Babur-Nama* (Tuzuk) (tr. by A.S. Beveridge) Vol. II (London, 1921) pp. 608-9.
67. *Ibid.* pp. 611-12.
68. M. L. Roychoudhury, *op. cit.* pp. 50-51, *Cf.* Rampran Gupta,

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He had a number of Persian painters, e.g., Mir Sayyid Ali and Abdu-s-samad, in his court. He kept a big library which moved with his camp, even to the battlefields.

Akbar inherited this spirit of toleration and artistic appreciation, free from any juristic restraint. He viewed things in his own original, ingenious way. He had fully understood the disastrous consequences of the orthodox policy which had been impressed upon and put into practice by the Sultans of Delhi. He knew from the very beginning that if an Empire has to be solidly founded and massively built, the Mulla should not be allowed to meddle with the affairs of the State, either in political or other spheres. His area of activity should be restricted within harmless boundaries. Akbar abolished, the Jaziya and removed all other humiliating and vexatious social, religious and political restrictions and disqualifications from the Hindus. They were now freely admitted in civil and military posts; they could now practise their religion as freely as the Muhammedans did. In this liberal policy of Akbar, the Great, lay the real strength of the Mughal Empire, which now rested conveniently and securely on the shoulders of the Rajputs. The conclusions which he deduced in the Ibadat-Khana, his Mahzar of 1579 (the so-called Infallibility Decree) and his institution of the Din-Ilahai clipped the wings of the Ulema, who were, thus, reduced to a position which was definitely subservient to that of the Emperor.

Akbar was keenly interested in painting, as in other arts, and it was from him that the art received its greatest impetus. More than 100 painters were employed by his court. His atelier was headed by the Persian master-painters Mir Sayyid Ali of Tabriz and Khwaja Abdussamad of Shiraz and included many Hindu artists of eminence like Daswant, Basawan, Kesu, Mukand and others. Akbar repudiated the orthodox point of view and allowed the depiction of animate forms in painting as well as in architectural decoration. Abul Fazl records the liberal attitude of the Emperor in the following incident, "I have to notice that the observing of the figures of objects and

Mughal Rajbansha, (p. 106); Khwandamir in his Qanun-i-Humayuni has recorded many interesting astronomical measures of Humayun *Cf. Qanun-i-Humayuni* of Khwandamir, tr. by Baini Prashad (Calcutta, 1940) pp. 23-26, 55,63.

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the making of likenesses of them which are often looked upon as an idle occupation are for a well regulated mind a source of wisdom and an antidote against the poison of ignorance. Bigoted followers of the letter of the law are hostile to the art of painting, but their eyes now see the truth. One day at a private party of friends, His Majesty who had conferred on several the pleasure of drawing near him remarked—'There are many that hate painting; but such men I dislike. It appears to me as if a painter had quite peculiar means of recognizing God; for a painter in sketching anything that has life and in devising its limbs one after the other must come to feel that he cannot bestow individuality upon his work and is thus formed to think of God, the giver of life, and will thus increase in knowledge.'[69]

(i) *The Depiction of Animate Motifs in the Buildings of Akbar*

Specimens of animate motifs in carved and sculpturesque decor in red sandstone are met with in large number in the monuments of Akbar at Agra and Fatehpur Sikri. Beautiful brackets having elephant mouths, with unmistakable tusks and trunk, are used in the eastern upper dalans of the Delhi-Gate of Agra Fort (Plate XCVII) which was constructed between 1565 and 1569. Pairs of haṃsas, with bold lotus flowers, are used on the lintels. Without doubt, they were carved by the traditional stone-artist of India and the forms are, therefore, manifestly conventional. The Jehangiri-Mahal in the same fort has a large number of carved elephants, parrots, makara, haṃsa and peacock. A frieze of the eastern wall of the palace is divided into panels, each having a pair of elephants facing each other in a pre-combat posture. Pairs of parrots in some cases and haṃsas in other are depicted on the lintels of doorways (Plate XCVIII) and in the carving decoration of the upper pavilions. More important than these common motifs of the indigenous art, are the serpentine brackets of the northern hall. Each bracket has a flowing makara, having a haṃsa in between the curves of the serpentine form (Plate XCIX). This is not an elephant-mouth as at a glance it

69. *Cf. Ain-i-Akbari*, Vol. I (H. Blochmann) (Calcutta, 1873) p.108., Page-167-168.

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seems to be. The Indian artist depicted the makara in a wide variety of beautiful forms with indescribable curves and twists, and this is also a particular mode of its representation.

The haṃsa which has been variously identified as the goose, the flamingo or the Brahmani duck and is sometimes described as only a legendary bird, was a very favourite motif in ancient Indian art. Like everything the Hindu artist depicted, the haṃsa too had a symbolic meaning. Because of its association with water and vegetation, it represented richness, gaiety and freshness.[70] Philosophically, it was a symbol of mind or the Ego. The haṃsa symbolised Puruṣa-Prakṛti tattva in Tantric works.[71] It is mentioned in the Ṛgveda.[72] The Upaniṣads used the word Hasṃa for the soul. It is alluded to extensively in the Epics.[73] It occupies an equally honourable position in Buddhist literature; the Haṃsa-jātaka deals with the same subject. It has found abundant mention in Sanskrit literature, e.g., in the Mṛcchakaṭika and Kādambarī.[74] The Indian imagination endowed it with moral virtues of the highest order and the haṃsa was ever treated as the noble bird, par excellence.

In Hindu iconography the haṃsa was depicted as the vāhana (vehicle) of Brahmā[75] while sometimes it was associated with Sarasvatī, the goddss of learning.[76] It has been used as a favourite element of decorative art in India since the time of Aśoka. His pillars at Sāñci, Sārnāth, Lauriya-Nandangarh and Rampurva have pairs or row of Haṃsas. Examples of its depiction also come from Mathura, Māmallapuram, Eran, Ajanta and other well-known sites of Buddhist and Hindu art during the first millennium A.D.

The haṃsa continued to be employed as a decorative motif even thereafter, and the Man-Mandir of Gwalior (1510-17) probably provides the best example during the early medieval

70. V. S. Agarwal, *Studies in Indian Art*, (Varanasi, 1965) p. 48.
71. Sir John Woodroffe (Arthur Avalon), *The Garland of Letters*, p. 156.
72. J. Ph. Vogel, *The Goose in Indian Literature and Art*, (Leiden, 1962) p. 12.
73. *Ibid.* pp. 17-29.
74. *Ibid.* pp. 10-11.
75. As sculptured at the Chalukyan temple at Aihole, *Cf. Ibid.* pp. 14-15.
76. *Ibid.* p. 16 (*Cf.* P. K. Gode, Haṃsa-Vāhana and Mayūra-Vāhana Saraswati, *JISOA*, Vol. IX 1941, pp. 133-40).

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period. It appears there on the glazed tiled friezes of glazed tiles in the interior courtyards and the southern facade of the palace.[77]

The indigenous artisans, who had been employed by Akbar, were free to take recourse to their traditional motifs. At times they little understood the symbolism of a motif and used it in their art as an auspicious element. But generally they depicted the ancient form with a meaning which seems to have been kept in view in the medieval ages as in the ancient times. If a haṃsa ornamented the abacus of an Aśokan monolith, it was never used below the lintels of the doorways in the monuments of Akbar. Howsoever conventionalized it became through constant usage, it symbolism in greater or lesser degree was known to the carver though, no doubt, the patron was exclusively concerned with its auspicious character.

The makara which is used in Indian art in a wide variety of forms is not a crocodile or alligator.[78] It is a highly ornate motif, formed every time by the fancy of the individual artist with graceful curves and twists like the Chinese dragon. This too is an amphibious animal, more fabulous than real.[79] In its conventionalized form it may look like a crocodile, an elephant, a rhinoceros, a serpent or even a monster.

77. J. Fergusson, *History of Indian and Eastern Architecture*, Vol. II (revised by J. Burgess) (London, 1910) pp. 175f; Louis Rousselet, *India and its Native Princes*, (London, 1876) p. 303.

78. "Originally a crocodile but gradually developing into a plump quadruped, provided with a twisted proboscis," *Cf.* J. Ph. Vogel, *The Goose in Indian Literature and Art*, (Leiden, 1962) p. 70. Reference may also be made to his 'Le makara dans la sculpture de l'Inde' (*Revue des arts asiatiques*, XVII).

79. A. K. Coomaraswamy (*Cf. The Transformation of Nature in Art*, (Dover ed. New York 1956) p. 4) explains the idealism of Indian art and its inherent spirit, "Naturalism is antipathetic to religious art of all kinds, to art of any kind and the spirit of traditional Islamic interdiction of the representation of living forms is not really infringed by such ideal representations as are met with in Indian or Christian iconography, or Chinese animal painting. The Muhammedan interdiction refers to such naturalistic representations as could theoretically, at the Judgement Day, be required to function biologically; but the Indian icon is not constructed as though to function biologically, the Christian icon cannot be thought of as moved by any other thing than its form, and each should, strictly speaking,

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The makara has also been mentioned abundantly in Hindu literature.[80] It is also one of the Hindu signs of the Zodiac, namely that for Capricorn. It is the cognizance of Puṣpadanta, the ninth tīrthankara of the Jainas.

Essentially aquatic, the makara has been designated as the vāhana of Varuṇa, the god of the waters.[81] It is also the vāhana of the river Gaṅgā.[82] The makara has been used in Indian art since the 3rd century B.C., e.g., on the railing at Mahābodhi, Buddhagaya, Bharhut, Sāñci, Ter, Mathura, Aihole, Kanheri, Ajanta and the Chalukyan temples. It forms a very interesting motif at the Man-Mandir of Gwalior (Plate C).

A peculiar feature of the makara motif is that it can be combined artistically with an architectural element, such as a toraṇa or bracket, in a curved and twisted form. Makara-headed volutes or toraṇas known as Śiṃsumāra-Śiraḥ were used in Indian art as early as on the Bharhut gateways. The device not only gives a beautiful ornament to that architectural part, but also places the motif at a prominent place, so as to be easily perceptible. Its use continued with greater convolutions and even greater effect in the Gupta and post-Gupta ages. The motif was popular in Gujarat, where it was carved more in wood than in marble. It seems the serpentine form of the bracket with the makara motif was introduced in Mughal architecture by the artisans of Gujarat who were liberally patronised by Akbar. It was a pure and simple artistic deivce.

(j) *Mayūra-Maṇḍapa of the Agra Fort*

The most magnificent in this series of animate designs is the 'Mayūra-Maṇḍapa', as it can appropriately be called, situated

be regarded as a kind of diagram expressing certain ideas, and not as the likeness of anything on earth." There cannot be a greater plea in support of the artistic representation of animate motifs. The 'Wave' motif with which the makara is often combined has been discussed separately.

80. e.g., Bhagavad-Gītā (10.31 ; Pañcatantra (4 and 2.33); Bhāgavata-Purāṇa (III.10.19-23); Amarakośa (I.10-20); Halāyudha (III.38) Lalitavistara (383. 9; 432, 4); Suśruta (I, 206, 27); Vājasaneyisaṃhitā; (XXIV.35) *Cf.* Henry Cousens, *The Makara in Hindu Ornament*, *A.S.I.* Annual Report, 1903-4, p. 230.

81. *Ibid.* p. 230.

82. as has faithfully been depicted at the Viṣṇu Temple of Deogarh.

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in the uppermost storey of the Jehangiri-Mahal to the west of the central Quadruple. The 'Mayūra-Maṇḍapa' is composed of an interior court open to sky, with a corridor around three sides (Fig. 9). The west side has a verandah opening into the court. An oblong chamber opens in this verandah. It has a central broad entrance with two smaller openings on the sides; their sills indicate that these side openings were not meant for entrance but for ventilation or visitation. The western wall of the chamber is entirely closed, with a niche in the centre and subsidiary niches on the sides. The centre of the floor to the side of the wall is occupied by a raised dais. There is a staircase on each side of the verandah and also a passage on each side of the central oblong chamber. This arrangement thus has a single oblong room with multiple passages, staircases, corridors, open court and terraces and obviously this would not have suited a residential purpose. It seems to have been a temple and its plan, particularly its orientation towards East, and the disposal of parts, e.g., the central niche and the raised dais, confirms the contention.

The construction is entirely trabeated with essentially Hindu designs and motifs, like the cakra, svastika, śrīvatsa, lotus, haṃsa and parrot. A chhajja projects on all four sides of the interior court and also on the exterior. The extremely wide and projecting chhajja is supported on beams and brackets. Each bracket supports a peacock (mayūra) on which rests the respective beam (Plate CI). The peacock is a full size bird, having upturned tail and wings. It holds a snake by its beak. The sculptures are bold and assertive (Plate CII). Their rhythmic disposal on the facade gives an extremely beautiful impression.

The use of the peacock-and-serpent motif and that too so prominently on such a large scale in a unique feature of this palace. It is not found anywhere else in Mughal art. Its employment inside the harem quarters of Akbar where Hindu princesses were lodged is significant. Of course, we do not know how these palaces were built or what happened inside them; the harem affairs were such closely-guarded secrets that they rarely leaked out and neither Abul Fazl nor Badaoni helps us to explain many a mystery concerned with the Imperial

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seraglio. It is, however, in a passing reference that Badaoni made the following fragmentary observation :

> "From early youth, in compliment to his wives, the daughters of Rajahs of Hind, he had within the female apartments continued to offer the Hom, which is a ceremony derived from sun-worship; but on the New-Year of the 25th year after his accession he prostrated himself both before the sun, and before the fire in public, and in the evening the whole court had to rise up respectfully when the lamps and candles were lighted."[83]

Badaoni's notes are full of bitter complaints and even reproaches; he charges Akbar with heresy and brands him an enemy of Islam. Indirectly, however, he confirms that the Emperor was extremely liberal, and cared little for Canon Law, to the extent of inviting the wrath of the orthodox Mulla whose views were those of Badaoni. Akbar might have allowed his Hindu consorts to practise their religion freely and, possibly he could have separated off a portion of the palace inside the harem quarters to facilitate their worship. The Mayūra-Maṇḍapa, most probably, was the temple which was built for the use of the Hindu inmates of his harem.

The mayūra is the vehicle (vāhana) or cognizance of Kārttikeya and, it appears, the temple was dedicated to this god. Mythologically, he is son of Śiva and Pārvatī and younger brother of Gaṇeśa. He is God of war and brings victory. His images and emblems were worshipded in India from the first century of the Christian era. Kārttikeya was the tutelary god of the ancient Rohitaka (modern Rohtak), the country of the Yaudheyas; they dedicated their State to him and regarded him "not only as their spiritual but also as their temporal ruler."[84] He is a Vyāntara Devatā or a secondary deity, being one of those folk-gods (laukika-devatās) who were accepted in the Hindu pantheon. Tribal coins from Eastern Punjab, Ujjayini, Rohtak, Bhita, Ayodhyā and coins of the Kushāṇa king Huviṣka depict Kārttikeya.[85] He is mentioned in the Kana-

83. *Cf. Muntakhabu't-Tawarikh.* Vol.II (tr. W. H. Lowe) (Calcutta, 1924), p. 269.

84. J. N. Banerjea, *The Development of Hindu Iconography* (Calcutta, 1956) pp. 140-43. Mahāmayūri confirms. Sudhakar Chattopadhyaya, *The Evolution of Theistic Sects in Ancient India* (Calcutta, 1962) pp. 113-14.

85. Chattopadhyaya, *op. cit.* p. 113.

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khera stone inscription of the Śaka chief Śrīdharavarman. On a terracotta seal discovered by Marshall at Bhita we find the inscription : "Of the illustrious Maharaja Gautamīputra Vṛṣadhvaja, the penetrator of the Vindhyas, who had made over his kingdom to the great Lord Kārttikeya."[86] He is referred to in an inscription from the Bilsad stone pillar of the time of Kumāragupta I (415-16 A.D.). He is depicted at Ellora. His worship as Skanda-Kārttikeya came to be completely merged in that of Śiva in Northern India of the post-Gupta period.[87] His statue has been discovered in the Tanesara hoard, of the 6th century A.D.[88] A similar statue was found at Mandsaur (Mandasor) in Madhya Pradesh.

Kārttikeya is always associated with the peacock as his cognizance.[89] It is there in the Śiva-Pārvatī relief from Tintoi and the Ardhanāriśvara statue of the Jhalawar Museum.[90] A stone relief of the Sarnath Museum is adequately illustrative. It shows Agni with wave-like flames. On the right side at the bottom is a peacock with its riding deity Kārttikeya.[91] On the left is a cock with a rider which has been completely defaced. Most illustrative in this connection is the red sandstone relief of the Gupta period now preserved in the Bharat Kala Bhawan, Banares. It shows Kārttikeya seated on a peacock with its tail outspread which serves as his prabhāvali. He holds a śakti which is his āyudha (customary weapon)[92] (Plate CIII).

86. *Ibid.* p. 114. This Vṛṣadhvaja belonged to the dynasty of the Megha rulers of Kauśāmbi who were ultimately exterminated by the first Gupta king Chandragupta.

87. He, as Subrahmaṇya, is a very popular deity in South India. There, shrines are dedicated exclusively to him. Murugan is his Tamil appellation. Other names of Kārttikeya, besides Subrahmaṇya, are Ṣaṇmukha Ṣaḍānana, Senānī, Tārakajit, Gaṅgāputra, Guha, Agnibhū, Skanda and Svāmināṭha.

88. R. C. Agarwala, 'Krittika Cult in Early Indian Sculpture' *Lalit-Kala*, No. 14 (1969) p. 56.

89. "His main cognisance is a peacock (barhiketu), he holds a śakti (a sort of spear) and is boyish in appearance"—this is how J. N. Banerjea has described Kārttikeya in Hindu Iconography, *Cf. op. cit.* p. 364.

90. U. P. Shah, *Bulletin of Baroda Museum*, XIII, fig. 52 on p. 75 and fig. 11 on p. 19 respectively.

91. No. 535, Sarnath Museum.

92. T.A. Gopinatha Rao, *Elements of Hindu Iconography*, Vol. II Part II, (Delhi, 1968), p. 430. Similar is the depiction of Karttikeya at Badami Cave No. 1, *Cf. A.S.I.* Badami Photo-Album Vol. I (1956) No. 422.

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The disposal of the plan with a raised dais in the central room and an open court before it, its orientation—that it correctly faces east—and the use of peacock sculptures on a large scale in and around the building indicate that the 'Mayūra-Maṇḍapa' of the Jehangīri Mahal was dedicated to the worship of the god Kārttikeya. Typically Hindu motifs, such as the lotus and haṃsa, are freely used in its ornamental scheme. In view of the liberal attitude of Akbar towards Hindu religion and the freedom of faith which was accorded to the inmates of his harem, it is not surprising that a temple was built in the palace itself for their use. The representation of the Mayūra-and-serpent motif with such emphasis and elaboration is noteworthy. Kārttikeya is the God of war and if Akbar chose to depict Mayūra, the god's vāhana, as devouring serpents, he wanted to convey the idea that the enemies of the Empire would be similarly destroyed, besides hoping for success in his campaigns. Akbar could have founded his belief in this simple symbolism of the motif. His was in a superstitious age and Akbar had no taboos. Thus while at best it was a temple, even at its worst he could have accepted it as a talisman. This is what the structure affirms. The existence of this temple in his palace in the metropolis of his Empire also gives an idea of the extent to which the Emperor could go in pursuance of his policy of 'Sulah-kul' (Peace with all). Mayūra-Maṇḍapa is a unique building in the whole range of Mughal architecture from the point of view of its structure and meaning.

(k) *Animation at Fatehpur Sikri*

Beautiful specimens of architectural painting of the reign of Akbar which freely depict living forms—birds, beasts and human beings—have survived at Fatehpur Sikri in the Khwabgah and the Palace of Mariam Zamani (also known as the Rangin-Mahal and the Sōnehrā-Makān).[93] The dados of the Khwabgah depicted almost the whole range of popular subjects, hunts, animal fights, sports, processions, durbars and some mysterious combinations. The subject of one painting is a boat with many occupants who have been carefully drawn

93. These paintings are on stone surfaces sometimes used directly, without plaster background.

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(Plate CIV). Another painting shows a winged angel (holding a young babe) among the rocks with a peacock and other birds. It has generally been interpreted as symbolising the birth of Salim at Fatehpur Sikri by divine grace. Another painting has a Buddha figure.[94] There are many other paintings which depict mysterious subjects and their meaning is not understood. For example one painting has two headless human beings, one over the other, with legs crossed. The bottom of the picture is filled up with the mutilated fragments of nude human beings, painted in gold, red, black and white. They are all falling and trunks, heads, limbs, hands and feet are all scattered around. On the left is a man dressed in white who is clapping his hands and is evidently rejoicing at the scene. The painting has not yet been interpreted. There is no doubt, however, that the depiction is entirely symbolic, having some religious, possibly Tantric, meaning. The representation of such subjects is a unique feature, not only in Mughal architecture but in the whole range of Indian art.

The palace of Mariam Zamani situated to the south of the Panch-Mahal is also called Rangin-Mahal because it had originally been richly painted both inside and out with frescoes. The drawings were spirited and well done. Coloured panels contained beautifully written couplets of Faizi[95] which have unfortunately mostly fallen victim to the ravages of time and man. Some scenes depicting elephant-combats are, however, lively to the day (Plate CV). One picture gives the view of an embattled fort, while another shows a big tree with beautiful birds like pigeons and storks.[96] Some are battle-scenes. Something like a tournament was depicted (Plate CVI). This palace also contains a series of mysterious paintings, the symbolism of which has not so far been correctly established. Winged angels have been painted on a panel. The same plate depicts a garden scene with a seated person, probably Akbar, approached by winged angels.

94. E. W. Smith, The Moghul Architecture of Fatehpur Sikri, Part-I, *A.S.I.* New Imperial Series, Vol. XVIII (Allahabad, 1894) p. 6; Plate XV(a).

95. *Ibid.* p. 33.

96. *Ibid.* Plate CXIV and CXV respectively.

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In addition to this wide range of murals, animate motifs are also represented in this palace in carved designs. The chhajja which projects exteriorly on three sides is supported on beautifully moulded brackets. The sides of these brackets have elephants or haṃsas on them. Surprisingly, the facades of two brackets—one on the north-east corner and the other on the north-west corner—have carved sculptures of Rāma and Hanumān respectively (Plate CVII & CVIII). The popularly venerated Hindu deities are in a standing posture. Rāma has a bow in one hand and a lotus flower in another. Hanumān, with his tail upturned, is attended by a junior monkey at his feet (see Plate XIII above). These are the only specimens of sculptured deities in the whole of Muslim architecture in India and justifiably arouse curiosity, the more so because they are at such an inaccessible height as sometimes to make them imperceptible. Probably they were used as auspicious guardians of the city, to ward off evils. There is no doubt, however, that the liberal use of these Hindu icons would have left a wonderful impression on the newly-recruited mansabdars on whose support Akbar so much counted in the seventies of the 16th century. Rows of haṃsas and siṃhamukhas are freely carved on the brackets.

The so-called Turkish Sultana's palace has beautiful forest scenes carved on the dados of the interior. One panel depicts pheasants perched amongst the boughs of trees and lions stalking beneath them[97] (Plate CIX). The carving is true to life without the slightest tendency towards stylization.

The exquisite carving decoration of the Sultana's House is excelled only by Birbal's Palace. Brackets, pilasters, dados and other parts of the walls, even the ceilings, are profusely ornamented with a wide variety of motifs, the chaste delicacy and grace of which bewilder the eye. Hindu features abound. Peacocks and haṃsas are used on the brackets which support the ornamental arches (Plate CX). Sometime a bird is depicted in its stylized form (Plate CXI). In almost all such instances, and also where ornamental niches have been made in the wall, the arch-shape is marked by a beautiful fringe of lotus-buds. In either case this fringe is supported by an animal

97. They have since been mutilated

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on each end. The animal is mostly the makara, used in different shapes and sizes in each case. In one panel however, it is an elephant (Plate CXII). The animal, be it makara or elephant, gives life and subtle radiance of movement to the otherwise conventionalized fringe of lotus-buds.

The so-called Jodhbai's Palace originally had a pair or a row of haṃsas or peacocks carved on the lintel of each doorway. They have since been obliterated systematically, though the traces of the original carving have survived. A pair of peacocks remains intact, accidentally it seems, on the frieze of the south suite. Many pairs of haṃsas have also survived on the frieze of the western pavilion, which seems to have been used as a temple. They are, however, in a very ruined state. In many instances the artisans have skilfully combined animate motifs with jalies or carved geometrical patterns. They were never noticed by the iconoclasts and have survived intact. One such example comes from a jali design of the northern upper pavilion, known as the Hawa-Mahal.

The main theme of the architecture of Fatehpur Sikri is the large scale use of such essentially Hindu features as the pillar, beam, bracket, chhajja and chhatri. The backet is employed mostly in a serpentine form, in imitation of the Jaina strut. In many cases the volute of the serpentine form issues forth from the mouth of a makara. The ceiling of the central hall of the palace which is generally, though erroneously, known as Ankh-Michoni, is supported by such brackets, the serpentine ornament of which, in each case, comes out of the mouth of a makara (Plate CXIII). They resemble the struts of the north hall of the Jehangiri-Mahal of Agra Fort except for the bird's beak which is not present in the latter. The struts of the so-called Astrologer's Seat or Hermit's Kiosk also have makara-mouths. This motif also appears in the Panch-Mahal on a number of its pillar-capitals.[98]

As the architectural traces testify, life size images of elephants were sculptured and installed at the Hathi-Paur of Fatehpur Sikri and the Hathiya-Paur of the Agra Fort (which is at present known as the Delhi-Gate); in fact they owe their names to those stone elephants.

98. e.g., E. W. Smith, *op. cit.* Part I, Plate-LXX.

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(1) *The Age of Jehangir*

Animate ornamentation appears in Mughal architecture even after Akbar, though the amount of the depiction gradually decreased. We do not perceive a major change at least during the reign of Jehangir, who did not interfere with the liberal policy of his august father. He was a great connoisseur of painting and employed artists separately for each branch. One set specialised in the depiction of birds and animals. Some masterpieces of Ustad Mansur have come down to us representing falcons or fowl, more truly and more aesthetically than a photographer can do.[99] Depiction of the makara, haṃsa and peacock in architectural decoration continued, and the illustrative specimens are met with on the eastern and western false gateways of Akbar's tomb at Sikandara, Agra, constructed between 1605 and 1612. One panel on the eastern gateway shows a pair of haṃsas and a fringe of lotus-buds supported at either end by makaras (Plate CXIV) like those in Birbal's Palace at Fatehpur Sikri. Another panel has a similar fringe of lotus-buds and a pair of peacocks over a wine-vase (Plate CXV). Peacocks are also depicted on the second floor of the main building. Curiously, the uppermost cenotaph of Akbar has a number of small butterflies, carved in white marble, amidst natural leaves, flowers and fruits (Plate CXVI). The depiction of these motifs in a tomb, which is also a place of religious sanctity and on a tombstone, is a significant point.

We also hear of mural pictures during the reign of Jehangir. Guerreiro who wrote in 1609 speaks of the figural paintings with which Jehangir adorned his palaces at Agra,[100] "....On coming from Lahore, he found his palaces of Agra well decorated and painted over with sundry pictures which had already been made, and others which were being executed, inside as well as outside in a verandah where he comes to sit daily to be seen by the people. Nearly all these paintings bore on sacred

99. An unfinished miniature ascribed to Ustad Mansur shows three haṃsas with firm outline and lively posture *Cf.* J. Ph. Vogel, *The Goose in Indian Literature and Art*, *op. cit.* p. 73, Plate XII (c).

100. *Cf.* Ernst Kuhnel and Hermann Goetz, *Indian Book Painting*, (London, 1926) pp. 63-64; reference may also be made to F. Martin, *Miniature Painting and Painters in Persia, India and Turkey*, Vol. II (1912) and C. Stanley Clarke, *Indian Drawings : Thirty Moghul Paintings of the School of Jehangir in the Wantage Bequest*, (London, 1922).

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subjects; for on the ceiling and in the middle of it was painted an image of Christ our Lord, very artistically done, with a halo and a circle of Angels, and on the wall there were some saints in miniature, as St. John the Baptist, St. Anthony, St. Bernardine, and others, as also some women saints....on each side of the window (Jharokha) there are three of them and above them, on the right, is painted Christ our Lord, holding the orb in his hand; to the left, the Virgin our Lady, copied in life size from the painting of Saint Luke. ....And, as the window where the King sits is made in the form of a niche, and painted all over, he had his two sons painted very richly in full length, on the same wall. Above one of his sons is a miniature figure of Christ our Lord, and a Father of the Society with a book in his hand; above the other is seen the Virgin our Lady.... . This is a painful eyesore to the Moors."

Niccolao Manucci who was employed in the Mughal artillery and saw action at the disastrous battle of Samugarh (1658) describes[101] how Jehangir had his father's tomb at Sikandara painted with frescoes, "This mausoleum is a very large dome of great height, made all of marble adorned with many kinds of precious stones, the roof all gilded and enamelled in many pleasing colours. The garden is very large and pleasant, walled in on all sides, with various seats inside. There were drawings of human figures. Over these the King Aurangzeb ordered a coat of whitewash to be applied so that the drawings might not be seen. He said such things were prohibited by the Mahomedan religion. I obtained entrance to this garden several times to inspect the mausoleum, being anxious to see the above-named figures before Aurangzeb should order them to be covered over. The figures in the principal gateway of the garden were a crucifix, the Virgin Mary, and Saint Ignatius. I had a great desire to obtain entrance into the great dome I have spoken of, and at last one of the officials at the mausoleum, who was a friend of mine, and also wanted to make use of me, believing I was a physician took me with him. The condition was that I should make a bow such as be made with great reverence and punctiliousness, just as if the King were still

101. *Storia do Mogor* (N. Manucci) (tr. by William Irvine) Vol. I (London, 1906) pp. 140-41.

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alive. He opened the door, and I joined with him in making a very low bow in total silence, then barefooted I went round and saw everything. As I have already said, there was a holy crucifix delineated on the wall, on the right hand of the crucifix the image of Our Lady with the infant Jesus in his arms, while on the left was Saint Ignatius the whole delineated. In the ceiling of the dome were great angels and cherubim and many other painted figures. There were also many censers which, were lighted every day. The hall is paved all over with stones of different colours. Outside the mausoleum in the garden, were many Molas (mullas)—that is to say, learned men—reading the Quran. On the dome outside, on the very highest, point, was a ball, and upon it a pyramid, the whole gilt. Most curious of all is the reason for having these paintings; it was only because they were a novelty in those days; it was not on account of religion".

More significant, and of greater interest, from this point of view is the picture-wall of the Fort of Lahore. Animal fights, hunting and polo-scenes form the subjects of these pictures which were executed in brilliant polychrome glazed-tiling during the reign of Jehangir (Plate CXVII). Floral and conventionalized patterns have been suitably disposed along with these panels which depict living forms on such a large scale.[102] It is a great masterpiece of art and one stands simply amazed to see the wonderful accomplishment of the Mughal artisan. Carving had been the traditional form of decoration in India and it is no surprise if the Hindu artisan employed by the Mughals had complete command over sculpturesque decor. But glazed-tiling had only lately been introduced and it is really creditable that the Mughal artisan mastered the art with such intimacy and lucidity as to be able to depict the typically Indian forms and features without any inherent weakness. Noteworthy is the fact that no other Islamic monument in India contains animate figures in glazed-tiles.

Pairs of elephants are also depicted, though with certain reservations, at the Kanch-Mahal, a palatial mansion near Akbar's tomb at Sikandara, Agra, which was built during this period.

102. The tile pictures are in about 116 panels and cover an approximate area of 24,000 feet.

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They are carved in stone so immediately below the chhajja between the brackets as to become almost imperceptible.

(m) *Animate Motifs at the Tomb of Itmad-ud-Daulah, Agra*

The most important, though the least known, depiction of animal designs during this period is in the tomb of Itmad-ud-Daulah at Agra. It enshrines the bodily remains of Mirza Ghiyas Beg and Asmat Begum who were parents of Nur-Jehan, the crafty consort of Jehangir. The tomb seems to have been built between 1622 and 1627. Cups and wine-vases, so characteristic of the age of Jehangir, are profusely depicted in inlaid marble. Their handles are serpentine with a bird's beak (Plate CXVIII). Though they appear to be stylized, the animation is unmistakable. The interior decoration mainly consists of painted floral and conventionalized designs. The artist used animal-motifs mostly inside the jar-shaped guldastas. Peacocks are frequently depicted; in one case, a dancing peacock is attended by his hens on both sides (Plate CXIX). Fish are also employed to form guldastas (Plate CXX). Curiously, a number of rats and dogs are depicted in a guldasta in the north-west corner chamber (Plate CXXI). It seems to be a representation of some story of Ayar-Danish (Pañcatantra). Its handles have a dragon-form and a lion's mouth. The central mortuary hall too has animate designs. Here lions are depicted in a number of cases (Plate CXXII). All these paintings are incised.

Surprisingly, human figures are also depicted in this scheme of painted panels. Of a number of jar-shaped guldastas each contains a kiosk (chhatri) and a human figure, in sitting posture, is very dexterously painted inside it (Plate CXXIII & CXXIV). The figure has been so artistically associated with the floral designs as to become almost imperceptible.

The depiction of animate motifs in this tomb on such a large scale, almost without any restraint, is indicative of the single fact that it belongs, heart and soul, to the age which is marked for the zenith of painting in medieval times. The miniature and portrait paintings of Jehangir had their impact on the mural decoration of this tomb so much so that the latter seems almost to be a translation of the former into plaster. The large scale use of Chinese cloud-forms in landscapes on these panels

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amply confirms the view. Some plants of this scheme appear to be copies from the masterpieces of Ustad Mansur. A few stories from the Pañcatantra, the manuscripts of which were painted during Akbar's reign, also seem to have been represented. Clearly the architecture of this phase derived great inspiration from the contemporary art of painting. The monument itself was so designed as to look like a beautiful picture, rather than a massive tomb (Plate CXXV). This is the most distinctive characteristic of the art of the tomb of Itmad-ud-Daulah.[103]

(n) *The Aftermath*

The tomb of Mariam-uz-Zamani[104] at Agra built after 1622 presents a problem-motif. Here we come across a faceless creature, with four legs depicted on the brackets of the upper kiosks. It shows that in certain sections the orthodox injunctions against the depiction of animate forms had been gaining ground and such decoration was sought to be gradually discouraged. Only this way can the elimination of the face be accounted for.

A definite change of policy set in with the accession of Shah Jehan in 1628. The orthodox view-point prevailed and court artisans were not allowed to take recourse to animation. Consequently, while the buildings of Shah Jehan have specimens of highly sophisticated floral, geometrical, inscriptional and conventionalized patterns, animate motifs are practically non-existent in the ornamental schemes of his sectarian, sepulchral or palatial mansions. No doubt, Shah Jehan allowed the black marble plaques from Italy, showing Orpheus and the birds

103. This is also a distinctive characteristic of the age of Jehangir. Miniature art not only inspired the architectural decorator, it also moved the weavers of textiles and rugs. Figure 201 of M.S. Dimand's *A Handbook of Muhammedan Art* (New York, 1958) depicts a beautiful Mughal rug which is almost a miniature painting : birds perched on trees, lion with his hunt, palm trees and a landscape are beautifully shown. It has obviously been inspired by a miniature. Fig. 202 (Cf. *Ibid*) also shows a Mughal rug with plant motifs and a profuse use of Chinese cloud-forms. Particularly noticeable is the three-dimensional curve of leaves which characteristically belongs to the art of the miniature.

104. See author's paper Mausoleum of Mariam Zamani in *Quarterly Review of Historical Studies*, Calcutta, Vol. X No. 2 (1970-71) for details.

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(Plate CXXVI) to be used in the alcove of the Diwan-i-Am of the Red Fort, Delhi. But they were considered to be curio-articles and were imported ready-made into India.[105] The tomb of Firoz Khan at Agra built during the Shahjehanian age contains animate forms,[106] but it was a private enterprise on which the traditional artisans of stone were employed. They were as yet free from the restraints of the orthodox ulema and were not much guided by the norms which were now being put into practice at the Imperial Court.

It was Aurangzib (1658-1707), the last great Mughal, who completely reversed, nay, negatived, the enlightened policy of his great-grandfather. He was guided by the orthodox point of view. In his iconoclastic zeal he adopted puritan measures prohibiting everything which was even slightly against Canon Law either in the spirit or the letter. His State was theocratic to the core, and functioned with the sole object of the exaltation of Islam. The rigours of his intolerant policy, based on a religious fanaticism, were felt in every walk of life. He gave as serious blows to architecture as to painting and music—and with them went the glory and grandeur of the Mughals, never to be revived or restored. It was not only a fight against the depiction of animation, it was an equally bitter conflict with the very spirit of the arts of India. The net result proved to be too disastrous to earn any justification of this most unenlightened policy of the Emperor.

What would have been the world of the orthodox 'ulema with this thoroughly negative approach, with all these 'nots' in force, is a matter of conjecture. A world without music, dancing, painting or other arts, without wine or sumptuous dishes, without fine dresses, gold brocades or costly silks, without gold or silver vases or ornamental articles, it would rightly be a world of complete negation and self-denial and the acceptance of a desert life of utter simplicity and poverty. Aurangzib by putting all these 'nots' into actual practice rigidly and unexceptionally probably for the first time in the History of Islam, reduced an Imperial State to ashes.

105. See author's *Colour Decoration in Mughal Architecture* (Taraporevala, Bombay, 1970) pp. 34-36, for details.

106. Reference may be made to author's paper Tomb Firoz Khan, *Quarterly Review of Historical Studies*, Calcutta, Vol. VII No. 3, (1967-68).

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(o) *The Depiction of Fabulous Animals (Gaja-Vyāla) at the Delhi-Gate of Agra Fort*[107]

Another aspect of great historical value of the depiction of animate motifs in Mughal architecture is the use of fabulous animals at the Delhi-Gate of Agra Fort. Akbar began the construction of this fort in 1565. The Delhi-Gate (Plate CXXVII), the first monumental gate of the Grand Mughals was completed in 1568-69[108]. It was profusely decorated; Akbar spared neither pains nor expense to give it a colour and character suitable to the entrance of the Imperial Castle in the Metropolis of the Empire. The magnificence and grandeur of the gateway were no doubt intended to impress and, possibly, to overawe the allies and the newly recruited mansabdars, who later formed the bulwarks of the Empire. All available artisans were employed; almost all possible schemes of decoration were made use of. It thus contained inlay and mosaic, stone-carving, chiefly in geometrical designs, stucco in arabesques, painting and, of course, glazed-tiling. Spaces had very judiciously been selected for the display of different techniques of decoration; they were most aesthetically distributed on the western facade which was composed of a central archway, flanked on both sides by attached double-storeyed octagonal towers. The harmony and rhythm with which these different and varied forms of ornament were used entitles the architect to the greatest credit. Much of it has, however, been defaced but enough remains to give an idea of how graceful and superbly magnificent the effect must originally have been.

Inlay art at the Delhi-gate is used mainly on the panels above the second storey arched openings, just below the frieze and cornice. These panels depict fabulous animals which are the only examples of their type in Mughal architecture. There are $12\frac{1}{2}$ panels on each side of the gate, each panel showing double animals or ducks alternately, separated in the former

107. Originally published in '*Medieval India : A Miscellany*, Vol. 2 (1972).

108. Al-Badaoni, *Muntakhabut-Tawarikh*, Vol. II, *op. cit.* p. 112; the mnemosynon 'The Elephant Gate is without compare' contains the date of its completion. The Delhi Gate was originally called the 'Hathiya-Paur' or the Elephant Gate on account of two life-size stone statues of Elephants with their riders, one on either side of it.

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case by a geometrical pattern and in the latter by an Assyrian palmette.

The composite animal is a curious one (Plate CXXVIII). The four legs and upright tail are those of a lion; the thin waist also seems to have been borrowed from the lion motif. The neck and the upright ears (which are not horns) have apparently been borrowed from the horse. The mouth is that of an elephant with its unmistakable tusks and trunk. Part of elephant's ear can also be seen. Besides, there are two wings supported on four subsidiary feathers inlaid with white marble pieces on a red sandstone slab. The tusks and nails are also in marble. The eye is presented in black marble. Thus the animal is composed of a lion, a horse, an elephant and a bird.

This fabulous animal is fighting with seven smaller elephants at a time, one it is holding tight by its tail, four are under its claws, one has been hurled into the air and the seventh awaits its fate under the trunk. One panel on either side shows seven elephants while the other five panels on each side have six elephants only. The fabulous animal is the same on all the 12 panels.

Every such panel alternates at an angle with the other panels showing ducks in pairs (Plate CXXIX) with the 'kushti' or 'sash' or the fringed ribbon which is so much associated with depiction of royalty under Sassanian art. Each duck has an extraordinarily curved and open beak. Each duck is separated from its counterpart on the panel by a traditional Assyrian palmette. The duck and the palmette are inlaid with white marble on red sandstone. Black marble is used for prominent parts such as the eyes and crown. Both types of panels are simply but appropriately bordered.

The appearance of these fabulous animals on the first and the most monumental gateway of Akbar is of great significance. We come across the use of composite animals in the earliest civilisations of Egypt and Mesopotamia. Many animal-gods were worshipped in ancient Egypt in the times of the New Empire. They had human bodies and animal heads. "The human bodies represented the anthropomorphic tendencies while the animal heads became types of qualities. For example, Anubis, with the dog emblem, was the door-keeper, the messenger, the custodian of the dead. Apis or Hapis, the sacred bull

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of Memphis, symbolised the renewal of life; he was identified with Osiris. ....Thoth, the god of wisdom and magic, was symbolised by an ibis, that stately mute, mysterious bird of passage in the Nile valley."[109]

Composite animals were used frequently in the Assyrian art, (Fig. 10), e.g., in the Palace of Sargon II at Khorsabad (722 -705 B.C.).[110] The forms which were generally followed in Assyria were the man-headed, bearded, and winged bull and winged and bird-headed lion. Winged deities with bird's head were also used, e.g., at the Palace of Ashur Nasir Pal (885 - 860 B.C.) at Nimroud.[111] In Assyria and Babylonia "Superstition and symbolism everywhere prevailed and it is evidenced in the man-headed bulls placed as beneficent genii at palace entrances to ward off evil spirits."[112] There seems to be no doubt that the composition of the animal was determined by symbolism and its prominent depiction on the palace-entrances by superstition.

The Greeks borrowed many ornamental features from Assyria which, besides the palmette and honey-suckle, included the fabulous animals. Examples of bird-headed winged lions have survived at Priene.[113] The Romans also copied this feature almost unconsciously; the temples of Antoninus and Faustina have carved friezes showing winged, bird-headed lions.[114] The Greeks and the Romans adopted the motif less as matter of superstition and symbolism than did the Assyrians and more as an ornament.

The mythological representation of Ahura Mazda in pre-Islamic Persia is in the form of an enormously winged deity.[115] The peacock-dragon, again a composite animal, had been used

109. Abdulla Yusufali, *The Holy Quran*, Vol. I (Lahore, 1936) Appendix-V, p. 409.

110. Sir Banister Fletcher, *A History of Architecture* (On the Comparative Method), (16th ed. London, 1956) pp. 50, 51, 58; also see figures E, F on p. 51 and Fig. E on p. 52 etc.

111. *Ibid.* Fig. H, p. 66.

112. *Ibid.* p. 50.

113. *Ibid.* p. 129 Fig. A.

114. *Ibid.* p. 204, Fig. J.

115. Andre Godard, *The Art of Iran* (Heron & Rogers) (London, 1965) p. 127, Fig. 136.

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frequently in Sassanian art prior to the advent of Islam.[116] Winged griffins were also used. Here again their use is guided by symbolic considerations than by a simply aesthetic outlook.

Winged motifs were frequently in the interior decoration of the Dome of the Rock (Qubbat-ul Sakhra) also called the Mosque of Omar where they are designated Cherubim.[117] They resemble the Assyrian and Sassanian griffins. Specimens have also been recovered from Mshatta,[118] the famous Ummayyid palace of the reign of Walid II (743-44). The popular institution of 'buraq' "upon which Muhammad is said to have performed the nocturnal journey (called Mi'raj)"[119] is representative of acceptance by Islam of the ancient symbolism, underlying the use of the composite animal. It was a white animal, with a human head and two wings, between the size of a mule and an ass. It represented strength and royalty and probably the superstitious belief that it would ward off the evil.[120]

The depiction of composite and fabulous animals in India, however, belongs to a remoter past. Such animals have been found on some seals in the Indus Valley art (C. 3200 B.C. to 2800 B.C.) prior to their dated depiction in Assyria. They generally represent the combination of a bull, a human face, the trunk and tusks of an elephant, and the hind legs of a tiger or other animals.[121] These art-forms might have been derived from a common heritage of a culture which extended from

116. *Ibid.* p. 193; also see Plate III and Fig. 121.

117. K.A.C. Creswell, *Early Muslim Architecture*, Vol. I (Oxford, 1932) p. 198.

118. Godard, p. 219, fn. 1.

119. T. P. Hughes, *A Dictionary of Islam*, *op. cit.* p. 44.

120. The Muslim theologians speak of the winged sphinx or Marichore, the mythical centaur, as follows : "Allah has placed in Eden animals which have the feet of antelopes, the body of tiger and head of a woman. Mahomet and Ali will each mount one of these animals on the Day of the Last Judgement, to distribute to the elect the paradisal water of Kauther." (*Cf.* Al-Gayet, *op. cit.* p. 189). Sadi and Firdausi mentioned many other imaginative or composite animals, e.g., the Simurgh, a mythical bird (see Andre Godard, *The Art of Iran*, *op. cit.* Colour Plate IV, p. 225 showing carpet design); griffin (a combination of eagle and lion) and hippograph (a winged horse with the head of a griffen) *Cf.* T.H. Hendley, Indian Animals: True and False in Art Religion etc, *Journal of Indian Art*, Vol. XVI, No. 122-128 (London, October 1914) p. 76.

121. V.S. Agarwal, *Indian Art*, (Varanasi, 1965) p. 37.

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West Asia to India in the hoary past. The earliest references to such fabulous creatures are met with in the Rigveda (VII.-104-22) where the mythical forms are called Yātu and six illustrative names are given, e.g., ulūka-yātu, suparṇa-yātu, etc.[122] The Purāṇas also mention them. References to the winged lion, winged bison, two headed eagle and other composite animals abound in literary works, e.g., in the Rāmāyaṇa of Vālmīki (Kiṣkindha, 42.16). Special terms were coined to signify them, e.g., mṛga-rūpa (animal-faced), aṇḍaja-rūpa (bird-faced), īhāmṛga (fabulous), vikaṭa-rūpa (mythical, chimerical and grotesque forms) etc. As it appears, these art forms were common to the Indians and the Sumerians, the Hittites, Assyrians, Cretans, Phoenicians and Scythians.

Besides this common heritage, the Indians invented a wide variety of fabulous animals of their own such as siṃha-vyāla, gaja-vyāla, aśva-vyāla, etc.[123] They were so popularly used for architectural temple decoration that śilpa-śātras carefully took up the subject and made up a scientific classification. The number of such animals came to be established at sixteen,[124] each represented in sixteen poses, thus giving an aggregate of 256 forms. These different forms were called Īhā-mṛga or fabulous animals. Vyāla-decoration occupied the places which had been allotted to it by the architectural canons, e.g., on the pedestal and on the entablature. Mānasāra enumerated for the former, "The padma should be ornamented with the petals of the lotus, the square, fillets with forms of gems, blossoms foliage, etc., and the kaṇṭha with figures of vyālas, siṃhas; or

122. *Ibid.* p. 72.

123. There does not seem to be any doubt as to the substantial Indian contribution to a great number of art motifs. "The stock of decorative motifs and thematic representations in early Indian art is so exceptionally rich, well defined and widely distributed that one is obliged to believe a preceding ancient tradition cultivated for many centuries in wood, clay, ivory, semi-precious stones, glass, textiles and metal. We have already cited some literary references in proof of their existence in the long expense of time covered by the civilisation of the Janapada age. What we come across in the Maurya, Śuṅga and Sātavāhana periods was a normal evolution of earlier art forms and not an avalanche of borrowing that visited suddenly. It is, therefore, essential for understanding the inspiration and meaning of Indian art forms to go deeper into their litearary traditions from the Vedic to the Purāṇic period and also to correlate them with continued survivals in folk art and other formal arts upto our own times" (*Cf. Ibid.* p. 74).

124. Aparājitapṛccha. 233, 4-6 (iti ṣoḍaśa vyālāni uktāni mukha-bhedataḥ). *Cf Ibid.* p. 72.

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of leaves, flowers and the like."[125] Further, the same South Indian Vāstu-text prescribed that in the third type of pillars the entablature would be divided into 21 parts, 8 given to the architrave, 7 to the cornice, and the remaining 6 would be reserved for the vyāla—the decoration with vyāla or fabulous figures.[126]

Vyāla figures were used for auspicious ornamentation at Bharhut, Bodh-Gaya, Sanchi (Fig. 11), Mathura and Amaravati (Fig. 12). The unbroken link marked the development of the outlines and the simplification of the symbolism. Dr Agarwala rightly observed, "Other mythical land and water animals rendered in beautiful friezes are shown on the copings and provide a handsome introduction to the subjects in the art of Sanchi and Mathura. It is clear that the carvers at Bodh-gaya elaborated their legacy from Bharhut and passed it on to their successors at Sanchi and Mathura in a more elaborate form. They show their originality in evolving new subjects specially the winged figures and in developing a style which is more direct, simple and unified, avoiding as far as possible complex or synoptic treatment as found at Sanchi."[127]

While the duck-panels of the Delhi-gate of Agra fort seem to have been directly inspired by the Sassanian art traditions of ancient Persia,[128] the gaja-vyāla panels derived their inspiration from Indian art conceptions. The Assyrian griffon and other vyālas are mostly bird-headed; here the head of an elephant has been combined with the composite animal, which is unmistakably an Indian feature and which has led us to the nomenclature-gaja-vyāla.[129] Of course, the intermediary links are missing,

125. Ram Raz, *Essay on the Architecture of the Hindus*, (London, 1834), p. 27.

126. *Ibid.* p. 33.

127. *Cf. Indian Art*, *op. cit.* p. 174.

128. Compare Plate-CXXIX (ducks of the Delhi-Gate of Agra Fort) with Fig. 8. (fowls of Samarsa of the 9th century).

129. T. H. Hendley (*Cf. op. cit.*) produced an illustration (Plate-Ia) which shows a huge bird called the Roc (Rukh) which is said to be a symbol of strength. It carries an elephant "which itself supports seven others of its own kind with its feet, tail, trunk and mouth....." (*Cf. op. cit.* p. 77). Hendley presumes it to be a representation of the Roc (Rukh) of the adventures of Sindbad, the Sailor, in the 'Arabian Nights.' This picture was exhibited (vide Illustration No. 379) in the festival of Empire and Indian Exhibition 1911. (Cf. *Journal of Indian art*, Vol. XV, No. 120, January 1913, p.80). Hendley's view however, appears to be based on pure imagi-

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the absence of which may lead us to re-examine the sources of the origin of these extraordinary art-motifs depicted on the magnificent gateway of the Imperial Castle of Agra, between 1565 and 1569. If, however, archaeological and architectural evidence is not of much help, we may rely on the art-traditions of the country which survived intact through all ups and downs until Akbar picked up the threads again and rejuvenated them with a new vista and a new vision. Art-motifs never appear like meteors; they appear in the long process of evolution, not as isolated miracles. Art inspirations have without exception a background which can almost with certainty be traced in the past as far as the spade of the archaeologist and the penetrative vision of the scholar can help. All genuine arts grow, develop and spread—they do not arrive out of the blue.

The gaja-vyāla panels of the Delhi-gate are the solitary example of the depiction of composite and fabulous animals in the Mughal architecture; they are the only specimen of their type in the medieval Muhammedan architecture of India. That they were depicted on the first great monument of Akbar and their use thereafter completely discontinued goes to indicate that Akbar at that early stage was led away by the superstition and the symbolism represented by these animals. They were probably considered to be auspicious to ward off evil spirits. Elephant, horse and lion are representative of royalty and Imperial dignity. The bird signifies the divinity, the promised divine help to the Empire; it represents 'the divine right of the Emperor'. The complete surrender of six or seven elephants to the 'gaja-vyāla' represents the unlimited might and the inexhaustible capacity of the Empire to subdue its enemies. As it seems, the later enlightenment which dawned upon the inquisitive Emperor did not permit him to let such symbolic portrayal to continue. Natural animate forms were liberally patronised in the later monuments of Akbar and in some of Jehangir. The ornament of the Delhi-gate of Agra Fort from this point of view stands unique and occupies an important position in the history of architectural decoration in India.

nation as though the Roc which Sindbad meets in his second voyage (and a pair of them in his fifth voyage) is no doubt a huge bird, it nowhere deals with any elephant (Cf. *Stories from the Arabian Nights*, ed. Andrew Langs, Longmans, London, 1920, pp. 89-97, 117-125 and Illustrations on p. 91 and 121).

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Chapter IV

CHINESE CLOUD-FORMS AND THE DADO-ART OF THE MUGHALS

(a) *Kalpa-Latā*

Curved motifs resembling scrolls, spirals or waves are very largely used in Mughal art. They fall into many categories. Thus there are arabesques which are used in the spandrels of the arches, either carved, stuccoed or inlaid, and in the carved panels for mural ornamentation.[1] Then there is the creeper-motif which is sometimes associated with the makara but which is used mostly in the form of spirals and scrolls on pillars, nook-shafts and panels on walls, particularly in their borders and sometimes on vaults. This seems to have derived its inspiration from indigenous sources.

We hear of the kalpa-vṛkṣa and the kalpa-latā of intricate foliage in ancient art. It is a wish-fulfilling tree, bestowing the fruition of human desires.[2] With infinite curves and twists it is generally associated with fruits, ornaments, dresses and other articles. At Bharhut it assumes the form of a lotus creeper. It is essentially a floral design. The carvers of Sanchi used this motif with unique richness and exhuberance.[3] Though stylized, this is based on a careful and faithful observation of nature. Its use continued during the Gupta age and even thereafter.

The creepers of the Sultana's Palace at Fatehpur Sikri have fruits and natural leaves (Plate CXXX) and were carved most probably by the traditional artist of India. In later examples fruits are absent and the design in each successive case tends to become more and more stylized and is used mostly on the borders of dado panels or jalies. The best examples come from the curtain around the cenotaphs at the Taj Mahal (Plate CXXXI).

1. The arabesque owes its origin to Islamic sources and has been discussed separately.
2. V. S. Agarwal, *Indian Art* (Varanasi, 1965) p. 48.
3. *Ibid.* p. 153.

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Another variety of the same class is the vine-motif which is used extensively in Gāndhāra and Mathura art. While retaining the creeper-form it is associated with birds and animals and sometimes human and celestial beings. It owes its full development to the Gupta age. This motif is found on a door-jamb from Garhwa which Cunningham described as "the undulating stem of a creeper with large curly and inter-twining leaves, and small human figures, both male and female, climbing up the stem, and sitting on the leaves in various attitudes."[4] The creepers at Bagh have haṃsas instead and are depicted with greater exquisiteness and effect (Fig. 13). Sometimes these creepers issue forth out of the mouth of a makara, pūrṇaghaṭa or a yakṣa. This creeper design is altogether absent in Mughal art, probably because there was a still more beautiful and intricate scheme of ornament of the same class which could be presented with greater effect.

(b) *The Wave Motif in Ancient Indian Art*

This is the third and the most important, the so-called, wave-pattern. It has no floral element at all, no fruits, not even leaves, but infinite curves, twists and intertwining tendrils. It is not formed of foliage and should not therefore be designated as patravallī or patralatā. It falls and rises like a wave and moves forth with exquisite grace like a sinuous scroll. Its forms are crescentic, its lines serpentine. It is sometimes combined with a fabulous animal preferably aquatic like the makara—to retain its wave character even in this varied form.

While the beautiful scrolls of Ajanta are mostly floral or foliated, a few motifs belong to the wave category. A painted panel from the ceiling of Cave No. 1 shows animal-mouths with wave curves and twists.[5] Another panel from the same ceiling shows a similar motif with a bison-head (Plate CXXXII). A panel from Cave No. XVII presents a similar composition.[6] A carved pilaster in Cave No. XXIII depicts[7] the fronton of a horse

4. *Cf.* Report of the *A.S.I.*, Vol. X, p. 12.
5. G. Yazdani (*Cf. History of the Deccan.* Vol. I. Part VIII. (London, 1953, p. 55) calls them "two freakish animals sporting with one another." Obviously it does not offer a convincing explanation of this important art-motif. Also see his *Ajanta*, Vol. I Plate X(c).
6. Yazdani, *op. cit.* Plate L (a).
7. R. S. Gupta, *Ajanta, Ellora and Aurangabad Caves*, (Bombay, 1962) Plate-XLVII.

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having tendrils like the Chinese dragon 'Lung' (Plate CXXXIII-a).

Two beautiful scrolls representing this wave motif have survived at the Bagh caves.[8] They are painted in Cave No. 4 and have beautiful curves and tendrils like sea-waves (Fig. 14). This motif is used extensively at the Temple of Śiva at Bhumara of the 5th century A.D. Here it is depicted in a highly stylized form, mostly in vertical panels[9] (Plate CXXXIII-b & c).

The motif is found gracefully portrayed in terracotta at the Brick Temple of Bhitargaon, also of the Gupta age. The Gupta temples of Deogarh have the wave-pattern carved on the door-jambs, and here it tends towards the arabesque. The ornament on the door of Unchdih (9th century A.D.)[10] and of Kauśāmbi (11/12th century A.D.)[11] is similar.

The Dhamekha Stūpa at Sārnāth provides another beautiful example of the wave-pattern (Plate CXXXIV-a). Here it is carved in stone in a very highly stylized form, with infinite curves and twists, suggesting a graceful rhythm which preserves the harmony as a whole and keeps it moving to and fro, and up and down with an almost perceptible spirit.[12] Another illustrative example of this motif with the makara is a frieze from Sārnāth assigned to the 5th century A.D.[13] (Plate CXXXIV-b). Other examples of Sārnāth showing the wave pattern are the śalākās (vertical architectural pieces) belonging to the 10th century.[14]

The motif is used with greater prominence in later ages. The temple doorway of Dhamtari has this flowing pattern carved

8. Sir John Marshall, *The Bagh Caves*, (London, 1927) Plate XVII.

9. R. D. Banerji, 'The Temple of Siva at Bhumara', *A.S.I. Memoir No.* 16 (Calcutta, 1924) Plates IV (a) and (b), VIII, (c), XI (a), (b) and (c); also see Pillar No. 230 and Lintels Nos. 45 and 162 from Bhumara, now in the Allahabad Museum.

10. Nos. 836 to 839 and 840 (a) at the Allahabad Museum.

11. No. 4538 of the Allahabad Museum.

12. Percy Brown called it a "spiral motif a combination of flowing wave-like curves" (*Cf. Indian Architecture*, Buddhist and Hindu period, IVth ed. p. 46); "wonderfully complexed spirals" *Cf.* V. A. Smith, *History of Fine Art in India and Ceylon*, (Oxford, 1921) p. 168. But its symbolism has not been explained.

13. No. 59.527/7 of the National Museum, New Delhi.

14. Panels Nos. 642, 644, 645, 646 and others exhibited in the exterior verandahs of the Sārnāth Museum.

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on its jambs.[15] It has been used as far in the west as Lamba, near Jodhpur, where the wave is carved on the three lintels within the mukhālinda near the garbhagṛha; "the southern one is most exquisite; in form, rhythm and rendering it refers back to the earlier parallel of the Gupta Temple at Bhumara...."[16] The Kāmeśvara Temple at Auwa, near Marwar Junction, of the 9th century A.D. also has the motif carved on the vedika panels.[17] A lintel from Abaneri near Bandikui (Rajasthan), of the 8th century, also shows the wave pattern.[18] Almost similar is the design carved on the stone lintels recovered from the Sultangarhi at Delhi belonging approximately to the same age (Plate CXXXV a & b). In this instance it has been beautifully animated with bison-heads.[19]

It is the chief motif of the ornamental scheme at the Teli-ka-Mandir at Gwalior. The compositional theme of many of the decorated panels at the temples of Khajuraho is the wave, which rises and falls and carries its movement upwards.[20] It is used there on śalākās (vertical panels) as well as on horizontal panels (Plate CXXXVI) for an example from the Pārśvanāth Temple). The incised carving provides a beautiful contrast to the sculptures in high relief and it appears that the decorator of Khajuraho had in view this graceful effect of the variety of shades.

In the south the motif is used with extreme elegance and refinement, generally combined with the makara and fabulous birds. The Virūpākṣa Temple at Paṭṭaḍakal provides an illustration (Plate CXXXVII). The fabulous bird, probably a haṃsa, has many graceful curves on its crown and many more at its tail. The wonderful friezes around the base of the temple at Somnāthpur have wave-tendrils. One of the most representative examples of the use of these curves and tendrils, however,

15. E.B. Havell, *The Ancient and Medieval Architecture of India*, (London, 1915) Plate-L.

16. M.A. Dhaky, 'The Old Temple at Lamba and Kamesvara Temple at Auwa', *Journal of the Asiatic Society*, Vol. VIII No. 3, 1966 p. 144. It has been assigned to the late 8th century A.D.

17. *Ibid.* p. 146. It is not a foliate scroll or arabesque as the author defined it.

18. No. 69.133 of the National Museum, New Delhi.

19. No. L/460 and L/461 of the National Museum, New Delhi.

20. e.g., at the Duladeo Temple, Cf. Stella Kramrisch, *The Hindu Temple*, Vol. I, p. 376, Vol. II Plate X.

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comes from the carved friezes of the Hoysāleśvara Temple of Halebid of the 13th century A.D. Here the makara form has a whole range of wave curves combined at its tail, (Plate-CXXXVIII) which adds as much prominence to the form as grace to its contours. A lintel from Hampi of the 12th century A.D. also shows the motif in an extremely exquisite form[21] (Plate CXXXIX). A tasteful variety of the wave pattern without any animal form was also depicted in the Khan Sarovar at Patan (in Gujarat) about the middle of the 15th century. It was thus used widely in India in Buddhist, Jaina and Brahmanical shrines for over a millennium as popularly as the aṣṭ-maṅgala (eight auspicious) symbols, and as effectively as the mithuna-mudrās.

(c) *The Undefined Symbolism of the Wave in India*

In spite of such an extensive depiction of this motif, the wave, as distinguished from the kalpa-latā and the vine-motif, has not been defined in Indian art. While we meet with a Śāstric interpretation of every trifle, it appears to be an extraordinary lapse on the part of the Ācāryas that they have not said a word about the symbolism of this art-motif. Its frequent appearance in the religious shrines of India, particularly from the beginning of the Gupta age, could not have been accidental, nor the result of an unconscious effort of the artisan to create artistic curves—without the inner meaning, which is so characteristic a feature of the art of India.

It may be noted with emphasis that Indian art is a monumental expression of metaphysical symbolism. It was not the aesthetic luxury of a few individuals but a persistent, conscious and well-regulated religion-oriented pursuit of the whole race. The Hindus never believed in art for art's sake; It was a sincere dedication for life's sake. Indian art is a vehicle for the conveyance of valuable religious ideas. The consideration of spiritual values is decisive in its progression. It always has an intelligible meaning and a definite purpose. Nothing like a secular art ever existed in India prior to the advent of the Mughals.

21. No. 50. 159 of the National Museum, New Delhi. A similar makara motif with tendrils is found in the Trivikramangam Temple, *Cf. A.S.I.* Photo Section, Kerala Album, Vol. I (1962).

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The symbols and icons of Indian art evolved on the basis that it is bhadrakṛt or the one which is auspicious. The motifs used in the ornamental schemes of the ancient Hindus were treated as auspicious symbols almost always with a thorough mythological background. Thus there were ideas and concepts like the swastika, chakra and triratna; animals like the makara and hastin; birds like the garuḍa and haṃsa; and articles like yūpa, śaṅkha and pūrṇakalaśa. Sometimes the number of auspicious symbols is restricted to eight,[22] but this is never a water-tight arrangement and a wide variety of these symbols is used freely in Jaina, Buddhist and Brahmanical works.

It is, therefore, surprising that while each and every symbol and each and every icon in Indian art has a meaning and is expressed with a purpose under a Śāstric prescription, the so-called wave-pattern which is used so largely and so extensively in Indian art has not been defined. We cannot of course lose and forget its meaning in a controversial relationship between realism and idealism.[23] Like any other feature of Indian art this too is not an imitation of some natural phenomenon but the symbolic embodiment of an idea, a thought or concept of an aesthetic feeling in its most abstract expression. This concept, if not an indigenous growth, could have been inspired by a neighbouring people through a cultural exchange which took place in the remote past.

(d) *The Wave (Techi') : A Fundamental Principle of Chinese Art*

We find a similar motif in Chinese art. The ancient Chinese were great artists. They evolved their own theories of art, their own standards and their own techniques. There are six principles of Chinese painting which differ from the six canons of Indian art.[24] The former are as follows :

22. V.S. Agarwal, *op. cit.* p. 159, e.g., Mīna-Mithuna, Deva-Vimāna-gṛha, Śrīvatsa, Vardhamāna, Triratna, Puṣpadāma, Indra-yaṣṭi and Puṛna-ghaṭa. This aspect has been discussed in detail in a preceding chapter.

23. "The reality of Indian art consists in the relation of the forms of the visible world with an inner rhythm which at the same time belongs to the forms themselves to the artist.....it makes flowers and plants surge in curves unforeseen by Nature yet significant of a life which takes its course in uninterrupted flow from emotion to form, from bud to leaf," *Cf.* Stella Kramrisch, *Indian Art and Art-Crafts*, (Madras, 1923) p. 1.

24. Yaśodhara in his Commentary on the Kāmasūtra of Vātsyāyana describes the six limbs of Indian painting as follows :

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(1) Spirit consonance and Life-motion.
(2) The Bone method in the use of the brush.
(3) Conformity to the object so as to give likeness.
(4) Correct colour.
(5) Care in Composition.
(6) Transmission of the tradition by making copies.[25]

Thus while Bhāva and Lāvaṇyayojana of Indian painting do not find a place in the six fundamental principles of the Chinese art, the most important aesthetic formula of the latter, viz., Spirit Consonance and Life-Motion is not mentioned in the Indian Śāstras. This is a characteristic feature of the Chinese conception of art.

Spirit consonance and Life-motion is both the most obscure and the most important of all these canons. "It holds that there is in nature an energy or spirit (ch'i) that gives life to all things, and to which the painter must attune himself so as to be able to impart this life to his paintings."[26] It suggests, to put it cuorsrily, that the characters and environment of a painting should not be depicted as still but vibrant with some inner

रूपभेदप्रमाणानि भावलावण्ययोजनम् ।
सादृश्यं वर्णिकाभंगः षडेते चित्रमंगलम् ।।

(Rūpabheda	—Knowledge of appearances
Pramāṇam	—Perspective and Correct Proportion
Bhāva	—Action of feelings on Forms
Lāvaṇyayojanam	—Infusion of Grace, artistic representation
Sādṛśyam	—Similitude
Varṇikābhaṅga	—Technique, artistic manner of using brush and colours).

25. Michael Sullivan, *Chinese and Japanese Art*, (The Book of Art Series, Vol. 9) (Grolier, London, 1965) p. 13; Laurence Binyon, *Painting in the Far East* (Dover, New York, 1959) p. 72, describes them as follows:—"First comes rhythmic vitality, or as Mr Okakura translates it, 'the life-movement of the spirit through the rhythm of things.' Next comes organic structure. The creative spirit incarnates itself in a pictorial conception, which thereby takes on the organic structure of life. Third comes the law of conformity with nature; fourth, appropriate colouring; fifth, arrangement; sixth, the transmission of classic models" Werner Speiser, *China*, (Art of the World Series 1960), (tr. by George Lawrence) p. 113.

26. Sullivan, *op. cit.* p. 13; Laurence Binyon (*Cf. op. cit.* p. 11) calls it rhythm: "In this theory every work of art is thought of as an incarnation of the genius of rhythm, manifesting the living spirit of things with a clearer beauty and intenser power than the gross impediments of complex matter allow to be transmitted to our senses in the visible world around us....."

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motion, that forms without the representation of this mysterious energy would be without life or meaning. Hsieh Ho[27] the Chinese painter of the 5th century A.D. designated this spirit 'rhythmic vitality' (chi-yun)[28] and this has been accepted through the ages as the first law of the Chinese art.

The 'chi' was the moving spirit of an external phenomenon which the artist aspired to represent through brush and colour. "The chi was held to be present in all living things—human figures, animals, birds and flowers, but above all in mountains and water, trees and rocks.[29] The representation of spirit was thus considered to be more important in a landscape than in animate objects. A number of poems have been quoted in classical works "which contain themes or suggestions for landscape paintings....e.g.,

'Clouds wait brooding for snow
And hang heavily over the earth
The Wail of autumn is unbroken
And the wild geese sweep over the sky'

....such lines could open up to the landscape painter limitless vistas of time and space."[30]

Thus seems to have arisen the idea of cloud-forms in Chinese landscape. Wang Wei (A.D. 699-759) explained this animated and spirited character of art forms as follows,-"They (the ancient pictures) had their origin in forms, (the forms) were made to blend with the spirit and to excite the heart mind. If the spirit has no perception of them, they exercise no influence; the eyes can see only the limits, but not the whole thing....to work at autumn clouds makes the soul soar as a bird, to feel the wind of spring makes the thoughts go far and wide....to exert oneself with strange mountains and seas, with green forests and

27. Hsieh Ho's book, the *Ku-hua pin-lu* is the Magna Carta of Chinese aesthetic criticism. He deals with 27 painters. Hsieh Ho enumerated these six values of painting and laid down the foundation of Chinese art.

28. Lin Yutang, *The Chinese Theory of Art*, (London, 1967) pp. 7, 34-37; the whole phrase 'chi-yun Sheng Tung' means 'a vital tone and atmosphere.' "It suggests a successful creation of tone and atmosphere that is moving and alive and by all Chinese criteria this tone and atmosphere, rather than verisimilitude, is the goal of a painting," *Cf. Ibid.* p. 36.

29. Sullivan, *op. cit.* p. 14.

30. *Ibid.* p. 14.

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the soaring winds, with the foaming waters and the rushing cascades—How wonderful !"[31]

(e) *The Chinese Dragon and the Indian Makara*

From the same theory of the representation of spirit (ch'i or tchi) seems to have originated the mythological dragon of China.[32] "In the superstition of literal minds the Dragon was the genius of water,[33] producing clouds and mists..... But in the imagination of poets and of artists" this symbolic figure, "Became charged with spiritual meanings, meanings which we should regard as fluid rather than fixed, and of import varying with the dominant conceptions of particular epochs."[34]

Sullivan explains the dragon form with greater clarity, "The dragon, that wholly playful yet somewhat terrifying creature, which brings the rain at the proper season and is so potent a source of benevolent energy that it has become a metaphor for the emperor himself, has been a popular subject in Chinese art since antiquity. The works of early dragon painters such as Ts'ao Pu-hsing (about 222-277 A.D.) are of course all lost, but fine paintings of the dragon entwined with a serpent (when they are shown together, they are a symbol, in ancient Chinese cosmology for the north) can still be seen on the walls of 6th and 7th century tombs near Pyongyang in Northern Korea.[35] The style of these tomb paintings is essentially Chinese. The climax of dragon-painting in China was in the late 12th and the 13th centuries,[36] when Zen ink painting was also at its height.

31. *Cf.* Anil De Silva, *Chinese Landscape Painting*, (London, 1967) p. 75 (quoted from O. Siren's *The Chinese on the Art of Painting*, Peking, 1936, p. 17).

32. "The painting of dragons was popular at the same period and close to it both in spirit and technique" *Cf.* Sullivan, *op. cit.* p. 64.

33. "Dragon was originally perhaps an alligator; probably it was worshipped as a river-god," *Cf.* Sullivan, *op. cit.* p. 258.

34. Binyon, *op. cit.* pp. 66-67; he continues, "In the Dragon is made visible the power of the spirit, the power of the infinite, the power of change... The Dragon is typical of the creative faculties of the Chinese genius, which had a singular gift for moulding into shapes of vivid and formidable reality those shadowy terrors of the unknown and the non-human world that survive in mankind from the infancy of the race; not without unconscious actual memory, perhaps, of a time when the monsters of primeval ages still existed.'

35. See Plate 64 A, *Cf. Ibid.*

36. i.e. under the Sung Dynasty (A.D. 960-1279).

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Indeed, the dragon might be said to be the equivalent in terms of popular Taoist mythology of the more lofty and insubstantial concepts of Zen idealists. When artists came to paint this wonderful beast they gave him the head of a bull, the horns of a deer, the body of a snake, and the talons of the fabulous p'eng bird. Like truth to the Zen adept, the dragon is never wholly revealed—Just when he seems to come within our grasp, he slithers behind a rock, soars into the clouds or plunges into the deep."[37]

A terracotta plaque from Ahichhatra, belonging to 2nd-1st century B.C., now preserved in the Allahabad Museum,[38] is an important pointer. It shows a Chinese dragon, with its unmistakable tendrils, curves and twists (Plate CXL). Its discovery, in such an ancient age, from Ahichhatra which was a significant centre of trade and culture in Northern India indicates towards the source of its import or inspiration. The item or the idea, as the case may be, truly came from China, where this artistic motif was in constant usage.[39] There was continuous inter-communication between India and China in commerce and religion and, through them, in art. Fa hien came to India about the 4th century A.D. and with the constantly roving monks and pundits, ideas and motifs travelled long distances from one country to the other—to be adopted and absorbed in the indigenous art.[40]

37. *Cf. op. cit.* pp. 64-65.; It is interesting to read about the technique of the greatest Chinese painter of dragons Chen Jung. When drunk he would give great shouts, "whip off his cap and using it as a brush smear and spatter ink on to the paper after the manner of the T'ang eccentrics. From the mists and clouds thus created he would make his dragons appear from emerging out of formlessness. Among scores of dragon paintings attributed to him, the finest and the one most likely to be from his hand, is the famous handscroll 'Nine Dragons appearing through Clouds and Waves' (Cf. Plate 64 B) signed and dated 1244. The details of this dramatic work show Chen Jung's technique : the mists and clouds smeared and spattered, perhaps with his cap; the dragons drawn with firm strokes....." (*Cf. Ibid.* p. 65).

38. No. 5173 of the Allahabad Museum.

39. A Chinese drawing for embroidery of the 14th century depicts an exactly similar dragon, *Cf.* F. R. Martin, *The Miniature Painting and Painters of Persian India and Turkey From 8th to the 18th Century*, Vol. I (London, 1912), Fig. 16.

40. An illustrative example of the depiction of Chinese Dragon in

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Fig. 15 depicts a typical makara of Indian art. Except for a portion of its fronton, it is entirely an ornamental composition formed of numerous wave-curves and flowing volutes as if it is still submerged in water and is only partially visible. This resembles in essence the Chinese dragon form 'Lung'. The essential similarity between the artistic form of the Indian makara and the Chinese dragon (Compare Fig. 15 and Plate CXL respectively) is not accidental but the result of conscious acceptance and absorption of a formula of art. Although we defined its pure and simple form in our own way, the makara, with its graceful curves and intertwining tendrils, which has been so widely depicted in Indian art seems to have been inspired by the Chinese dragon, and the form came to be established about the beginning of the Gupta period.

The wave-pattern which was used in ancient Indian architecture for mural ornamentation on such a large scale also developed, without doubt, from the same inspiration. The essential similarity of the two motifs and the total absence of its definition or meaning in Indian art with a complete interpretation of its symbolism in its Chinese counterpart illustrates that it originated in 'tchi' and, if not the meaning, at least the idea of its artistic depiction came from China and gradually settled in India.

(f) *The stylized 'Wave' in Mughal Architecture*

As shall be shown hereafter, this motif came to Mughal art through Persian painting during the second half of the 16th century. It was used abundantly in Mughal architecture, either in a very stylized design for mural ornamentation or, more definitely and assertively, on the dados of Mughal buildings as part of the landscape. The earliest example of the former scheme is met in the incised stucco art on the stalactite vaults of the vestibule of Akbar's tomb at Sikandara (Agra) which was built between 1605 and 1612. It coincided with the development of Mughal painting during the reign of Jehangir. It was similarly used on the stalactite soffits of the corner rooms of the tomb of Itmad-ud-Daulah, also at Agra. The use of Chinese cloud-forms on the ceilings of the northern and southern

Indian art in the later ages is found on the ceiling of the mandapa at Aihole in the Jain Cave Temple. *Cf. A.S.I.* Photo-section Aihole Album Vol. III (1965) Plate No. 1000/65.

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side-halls is most pronounced. This pattern which looks like a Persian conventional is really composed of innumerable Chinese cloud-forms used one after the other, in quick succession (Plate CXLI). The design is made up of these forms which flow continuously along the whole span and provide a beautiful border to the central pattern. It is carved in relief on stucco and was originally painted deep blue and gold. The tendrils present extremely graceful curves, while an artistic rhythm is presented by the continuity of the design. It is also used at this tomb on a large scale in inlaid borders in a variety of beautiful forms. In one of such examples on the exterior, it has graceful tendrils, spiralling in two series which cross and recross one another.

The motif which is depicted on the arch-shaped sides of the bases of the Diwan-i-Khas pillars in Agra Fort, (see Plate II above) belonging to the reign of Shah Jehan, is essentially the same, though the curves have been regulated and are used in a highly stylized way. Here the design is inlaid. To produce a varied, and hence a beautiful effect, it is associated with vase-and foliage in low carving, in the centre. The motif is similarly represented in stylized form in the Khas-Mahal of Shah Jehan, in painted designs on white marble surfaces, e.g., in the central bay overlooking the river. Here it has the same beautiful curves and twists. Chini-ka-Rauza, the tomb of Shukrullah Shirazi entitled Afzal Khan who was Diwan of Shah Jehan, also has this design painted in beautiful colours on the stalactite vaults of the mortuary hall (Plate CXLII). The tendency as usual is towards stylization so that it may be suitably used along with such typically Islamic designs as the stalactite on vaults and soffits. Though floral designs are also used simultaneously, it bears a distinctive identity of its own.

(g) *The formulation of Dado-Art in Mughal Architecture*

The most important and explicit depiction of the Chinese cloud-form is found on the dados of Mughal buildings. It is used independently and individually on the upper parts, though, as a matter of fact, it was intended to form part of the landscape, which in some cases does not exist. The earliest example is found at Fatehpur Sikri in the so-called Sultana's Palace. Its beautifully carved red sandstone dados depict forest scenes

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in a natural spirit (Plate CXLIII). Chinese cloud forms occupy the upper space of the panel, which would otherwise have been left blank. Surprisingly, these forms harmonise with the dense vegetation of the scene and fill in the space as if they too were an integral part of the design-composition.

Chinese cloud-forms are used next on the uppermost cenotaph at Akbar's tomb at Sikandara, Agra (1605-1612). The cenotaph is of white marble and has vegetational, conventionalized and inscriptional designs in incised carving. Its north and south sides depict a natural design, composed of twigs and leaves, and flowers and fruits which are very densely, yet very exquisitely presented in the style of a dado-panel.

These clouds are used on a very large scale at the Tomb of Itmad-ud-Daulah for mural ornamentation. The panels above the dados have incised painting and stucco work, chiefly in floral designs. The sunk niches, too, have florals, though almost all of them have a guldasta, formed of vase and foliage, as the central theme. Chinese cloud-forms are used elaborately on all these panels and sunk niches, in a wide variety of curves and flows. Sometimes they are small and delicate and resemble butterflies (Plate CXLIV) while in other cases they are used boldly like the dragon (Plate CXLV). Their use, however, is limited to the upper parts which would otherwise have been left blank. They rightly suggest the clouds filling the landscape of a miniature-painting and it appears they have been directly inspired by the latter.

These cloud forms are again used on the white marble dados of the Musamman Burj in Agra Fort, (Plate CXLVI), belonging to the earliest period of Shah Jehan's reign. The dado panel has a beautiful border, inlaid with coloured stones. The centre, on the other hand, has carved plants in two series, one over the other. Chinese clouds, as elsewhere, occupy the upper blank spaces, chiefly the corners of the panel (Plate CXLVII). These forms are also used in the later buildings of Shah Jehan, e.g., on the dados of the piers of the Diwan-i-Khas at the Red Fort Delhi.

As has already been mentioned above, these cloud forms, which symbolised tchi or spirit consonance and life motion, were almost invariably depicted in Chinese landscape-painting.[41]

41. See Appendix-'D' for a few representative examples.

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Tchi was the first fundamental principle of Chinese art. It was held to be present not only in living beings but also in mountains, rocks, waters, and trees, and the Chinese painter sought to represent this rhythmic vitality and moving spirit through these cloud forms. "Clouds welling up from a valley may be interpreted as the visible emblem of the 'ch'i' the cosmic spirit that animates all things."[42] Its use in Chinese art was universal; particularly in painting it formed an almost essential feature of landscaping, without which a piece was considered dull, lacking in depth and inherently weak. A treatise on landscape painting by Ching Hao, a 10th century Chinese painter "sets out the ideals of these painters. He stresses the need to study nature, so that all its infinite forms and moods can be accurately represented, but he insists that more important than mere accuracy is the animating spirit (ch'i), without which the forms have no significance."[43] The idea of this artistic depiction travelled far and wide, through religion, conquest and commerce. It was accepted and absorbed in Tibetan art and the most famous scrolls liberally depicted these cloud forms[44] (Plate CXLVIII).

Timujin, popularly known as Genghis Khan, devastated Samarqand and Rayy in A.D. 1220. This conquest also marked the beginning of communication between China and Iran. The Mongol penetration of the further south west continued. Hulagu, younger brother of Kublai Khan of China, sacked Baghdad and put the Caliph to death in 1258, and the Ilkhans established their control of Maragha, Sultaniya and Tabriz. The fall of Baghdad coincides with the death of the typical Arabic art based on antique traditions and marks the birth of true Persian art with Chinese influence in drawing, colours and general scheme. In 1295 the Ilkhan Ghazan embraced Islam. A period of great artistic activity followed in Iran where the influence of the Far-East gradually mounted. The Ilkhans drew artists from whole of their domain; their patronage was

42. Sullivan, *op. cit.* p. 258.

43. *Ibid.* p. 43.

44. J. Hackin, Mythology of Lamaism, *Cf. Asiatic Mythology*, (London, 1932) fig. 24 entitled Lha-Mo. Other figures (e.g., 1, 2, 3, 4, 6, 7 and 10 Cf. *Ibid.*) also depict these forms.

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specially extended to Chinese artists.[45] Chinese textiles, paintings and porcelain were imported into Iran. Chinese patterns and motifs were freely adopted by the Persian artists.

Particularly noteworthy was the development of painting during this period. Painters from all over the Empire flocked to Tabriz, the capital, and gradually a new and distinct style of painting came into being. Some illustrated manuscripts of this period have come down to us and throw valuable light on the inspirations which contributed to the formation of this style.

The first of these manuscripts is a copy of the Manafi al-Hayawan (on the usefulness of animals) of Ibn Baktishu, popularly known as the Morgan Bestiary. It was illustrated in 1294 at Maragha. The illustrations have an apparent Chinese influence; "indeed some of the illustrations in this book are so Chinese that they might even be attributed to immigrant artists from the Far East..... Such a miniature as that depicting a phoenix is wholly Chinese."[46] (Plate CXLIX). In other manuscripts the influence was decisive and the style assumed a new constitution.[47]

Ghazan who ruled at Tabriz from 1290 to 1306 and his vizier Rashid-al Din were great patrons of arts. A history of the Mongols and afterwards a history of the world were compiled under their patronage.[48] Illustrations were included. Chinese influence is apparent in the vividness of the presentation and the setting of the figures in a landscape.[49] Manuscripts of the national epic, the Shahnama, which was composed by Firdausi in the early 11th century, were copied and illustrated first about 1330 by the artists of the same school.

The Royal Asiatic Society ms. of the History of Genghis Khan and his family, dated A.D.1314 shows Mongol types, and the Mongol fashion of drapery and is decidedly reminiscent of the Chinese manner of drawing.[50] Chinese cloud forms, which

45. Doughlas Barrett, *Persian Painting of the 14th century*, p. 4; Percy Brown, *Indian Painting Under the Mughals*. (Oxford, 1924) p. 38.

46. Rice, *op. cit.* pp. 114-15.

47. "It was this blend that constituted the basis of Persian miniature painting from the mid-fourteenth century onwards" *Cf. Ibid.* p. 115.

48. Basil Gray, *Iran*, (Unesco Art Series) Preface p. 7.

49. *Ibid.* p. 7.

50. Laurence Binyon, *Painting in the Far East*, (3rd Dover ed.) (New York, 1959) p. 168.

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symbolised spirit or 'tchi' were thus brought to Iran and introduced into Persian art. They were freely depicted in landscapes, like their Chinese counterparts, and were, beyond doubt, the logical consequence of the "reception by Persia of a decorative repertoire of Chinese origin, which had been carried across the Mongol empire and was to stimulate the imagination of its miniaturists."[51] This Chinese cloud form was designated 'kilin' in the Persian art.

The conquests of Tamerlane (Timur) at the end of the 14th century gave great impetus to cultural intercourse and the fusion of ideas. Under Tamerlane and his successors miniature painters who had established themselves at Samarqand and Herat flourished. "The Chinese element was soon assimilated and a new native school arose which gradually matured into the sumptuous art of the fifteenth and sixteenth centuries. But to Chinese influence again was due the formation, about the beginning of the fifteenth century, of a school which flourished at Samarqand under Tamerlane and his successors, and which relied on a pen outline of exquisite quality, with either no colour at all or a few discreet touches of red and blue or gold."[52]

Tamerlane's eldest and ablest son Shah Rukh (1404-47) was established at Herat, which became one of the greatest seats of cultural activities in the orient. Religious treatises, like Miraj-Nama or 'Life of Muhammad' were compiled and illustrated during his reign.[53] The art of miniature painting at Herat reached its fullest development under the patronage of his son Baysunghur Mirza. Delicacy and softness of workmanship became the predominant theme of the style. Shahnamah and Kalila and Dimna are the most famous illustrated manuscripts of his period.

"Chinese motifs such as the kilin or stylized cloud-form were almost invariably present, though there was nothing Chinese in the actual style."[54] As in Chinese art these cloud forms were depicted generally in the background in landscape, e.g., in an

51. J. Sourdel Thomine, Cf. *The Encyclopaedia of Islam*, Vol. II (1965 ed.) p. 776. See Appendix—'E' for a few representative examples of the depiction of kilin in Persian painting.

52. Binyon, *op. cit.* pp. 168-69.

53. A copy was done in 1436 which is now in the Bibliothèque Nationale Cf. Rice, *op. cit.* p. 218.

54. Rice, *op. cit.* p. 218.

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illustration of the Shahnama of Herat dated 1440 (Plate CI) though they were also shown in a variety of wave-patterns, as in an illustration of the Miraj-Nama dated 1436 entitled 'The Ascension of Muhammad' (Plate-CLI). The Chinese dragon was also represented in a number of cases, e.g., in a manuscript of the Shahnamah painted about the same time, now preserved in the National Library, Calcutta.

The indigenous elements gradually asserted themselves and Chinese influence became minimal. Bihzad, the most famous of Persian master-painters, who worked at Herat and Tabriz in the latter part of the 15th and early part of 16th century under Husayn Bayqara, the last of the Timurids, and Shah Ismail, founder of the Safavid dynasty, developed a style of his own. He was a master of pathos. His paintings are full of action. There is suffering, loneliness and withdrawal. Bihzad was an innovator in characterization.[55] The features which had been completely absorbed in Persian painting, however, remained unaffected by this trend of development. This was more particularly the case with the depiction of 'kilin' than of anything else.[56]

The inspiration of the Mughal school was Persian painting, as Chinese art was of the latter. Humayun stayed at the court of Shah Tahmasp, the Safavid Shah of Iran, for a number of years after his defeat and flight at the hands of Sher Shah. When he (Humayun) returned to India he took with him two Iranian painters Mir Sayyid Ali and Khwaja Abdussamad, who were patronised later by his successor Akbar. They headed his atelier and superintended his grand projects, e.g., the Hamza-Namah. It was under their guidance that the Indian artists worked and thus was founded the Mughal school of painting.[57]

55. Basil Gray, *Iran*, *op. cit.*, p. 10.

56. This is how Persian painting at this stage has been defined; it "was two-dimensional art, idealy suitable for manuscript illustration, eschewing shading and perspective, essentially decorative in intention and marked above all by its brilliant use of mosaics of pure colour and its swift calligraphic linedrawing. Its conventions, such as the high hill background, certain stereo-typed gestures, the adoption of several points of view simultaneously the employment of elaborate patterns in carpets or canopies or architectural details, its Chinese cloud forms its flowers affectionately enlarged are all deliberate departures from nature into a world of sheer romance" *Cf.* J.V.S. Wilkinson, *Mughal Painting*, pp. 2-3.

57. Basil Gray, *Iran*, *op. cit.* p. 10.

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By the end of the 16th century the Mughal style became fully formed as a result of the fusion of Iranian and Indian art traditions.

Hamza Namah is the earliest illustrated work of Akbar's style. Its paintings bear distinct Persian influence.[58] The facial features of characters, combination of colours, style of ornamentation and the decorative motifs, aerial perspective and vegetation and landscape—all derived inspiration from Persian art. This influence, no doubt, gradually subsided, and the indigenous artists asserted themselves by the end of the 16th century, but the Persian element continued to be visible more or less through out the reign of Akbar and in a certain degree even thereafter.

'Kilin' or the Tchi motif also came into Mughal art from Persian painting. This cloud form is depicted as usual on the upper part of the painting as part of the landscape.[59] It is surprising that while the Indian painters freed themselves of Iranian influence during the reign of Jehangir, the Chinese cloud form continued to be used on a larger scale. Illustrative examples come from the miniatures of '*Muraqqa-i-Gulshan*', a collection of paintings by Jehangir, e.g., Plate CLII and CLIII in which it is painted conventionally, while in Plate CLIV the tendrils of the tiger are similar to those of the traditional Chinese dragon 'Lung'. The fabulous creature of China also inspired the violent movement of animals in Mughal painting.

Mughal painting reached its highest point of accomplishment during the reign of Jehangir. The Emperor had a profound love for natural beauty and "the artist's brush was requisitioned for drawing the likenesses of anything, particularly beautiful or peculiarly novel in the realm of Nature."[60] The animal and plant studies made by Ustad Mansur, Murad and Manohar constitute a separate branch of Mughal painting and add a unique chapter to the History of Indian graphic art.

To this period belongs also the practice of mounting the miniatures with hashiyahs (borders). The development of this

58. Percy Brown, *Indian Painting Under the Mughals*, (Oxford, 1924) p.56.
59. For example see Emmy Wellesz, *Akbar's Religious Thought Reflected in Mogul Painting* (London, 1952) Plate-12 showing a painting from the manuscript Razm-Nama done by the court painter Ramdas about A.D. 1580.
60. N. C. Mehta, *Studies in Indian Painting* (Bombay, 1926) p. 78.

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artistic formula was almost an innovation. Of course, the original inspiration came from Iran. There, gold painting for border decorations was first introduced in the 15th century in western Turkistan.[61] Later the technique spread into other Persian centres.[62] Thence it came to India where it became general. Jehangir collected miniatures and calligraphic works of various dates and origin and put them together in a superb album, the margins of which were gorgeously decorated by his own artists.[63] It was designated the Muraqqa-i-Gulshan (Flower Garden Album).

These hashiyahs depicted plants, birds and animals or landscapes in bright colours, sometimes realistic, sometimes fantastic. Conventionalized designs gradually came to be preferred as they avoided monotony and produced a lasting aesthetic impression (Plate CLV). These borders borrowed their conventionalized and vegetational patterns from Persian art; the curves resembled the arabesque scrolls of the Persian miniatures rather than the lotus and mango motifs of Ajanta and Bagh. The flowers also were typically Persian for example, tulip, iris, narcissus, etc. They were superbly done by many artists in collaboration and constituted a complete work of art in themselves.

These borders gave the miniatures an impressiveness and a definition which was hitherto unknown. Sometimes the border predominated over the whole miniature. Indeed no work was considered complete without a sumptuously painted hashiyah with bright-hued flowers, butterflies and birds, and this form of embellishment gradually became a distinctive feature of Mughal art.

Thus a special branch of miniature painting established itself firmly during the reign of Jehangir. It depicted plants and flowers; Chinese cloud-forms at times appeared in the background, sometimes as part of the landscape and sometimes simply to fill in the blank space. And it had graceful borders with

61. Ernst Kuhnel and Hermann Coetz, *Indian Book Painting*, (London, 1926), p. 45.

62. A miniature from Khamsa by Mir Sayyid Ali has a border with ducks and birds amidst floral designs, *Cf.* D.T. Rice, *op. cit.* fig. 231.

63. Andre Godard, *Iran* (Unesco) p. 18; Plates XVI and XVII depict garden scenes by Bihzad about 1480. Hashiyahs done by Jehangir's painters are full of birds and animal heads. Similar hashiyahs have been put to Plates XX to XXIV.

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conventionalized floral scrolls. "The picture border is composed of sprays of flowering plants conventionally around the picture and thus framing it in a delightful design of broken colour while the whole is carefully arranged to harmonise with the central colour scheme. Butterflies and birds are sometimes introduced and it is difficult to imagine a richer or more glowing work of pictorial art than one of these flower framed miniatures of Jehangir's court painters. The plants ordinarily represented in these borders are poppies, wild straw-berries, jonquils, lilies, iris, marguerites and similar common flowers of the hills and plains but sometimes these are so conventionalized as to become difficult to identify."[64]

Such miniatures, because of their inherent beauty and superb aesthetic effect, much impressed the architectural decorator, who translated them into stone. He utilised it chiefly on the dados of buildings in white marble panels. The plant with leaves and flowers in natural bands and curves was generally carved. The Hashiyah, on the other hand, was inlaid with rare or semi-precious stones representing exactly the same colours which were used in the miniature. Curiously, the Chinese cloud-form was also copied by the mason from miniature-painting and we come across its liberal use on the ornamental panels of the Tomb of Itmad-ud-Daulah and then on the dados of the Musamman Burj in Agra Fort. This ornament was employed as early as at the tomb of Akbar (1605-12) and as late as at the Taj Mahal (1631-48) during the reign of Jehangir and Shah Jehan.

That the inspiration of Mughal dado art came from the contemporary painting seems certain. E. B. Havell rightly observed in this connection that the Indian inlayers "imitated the work of the Persian artists who founded the Indian school of painting of the Mogul period. The step from the Itmad-ud-Daulah to the Taj is simply the change from a conventional school of Persian painting to a more developed and more realistic one. This is only what we might expect, if we remember Shah Jehan's resolve that the Taj should surpass every other building in the world. That there was a strong naturalistic tendency in the Indian painting of the Mogul period is known to all who have

64. Percy Brown, *Indian Painting*, (Calcutta, 1927) p. 84.

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studied this interesting phase of Mogul art. It is very clearly shown in a series of exquisite miniature paintings of Jehangir's time, now in the Government Art Gallery, Calcutta, which I fortunately rescued from the unappreciative hands of a Muhammedan book-seller a few years ago. They include portraits of the nobles of Jehangir's court and some studies of Indian birds, drawn and painted with a fidelity and delicacy which would do credit to a Japanese master. On one of them, sealed and signed by Jehangir himself, there is a note, written by the Emperor, to the effect that it was painted by Ustad Mansur, 'the most celebrated painter of this time,' in the nineteenth year of his reign (A.D. 1624, six years before the Taj was begun). The border of three of these paintings are ornamented with floral designs which, making allowance for the different technical treatment required by a different material, are of the exact type of the Taj decorations. No one who studies these remarkable paintings and compares them with the floral decoration of the Taj would hesitate to say that it was the work of this Persian school, and not any European model, that the Indian mosaic workers were imitating. It might possibly have been these paintings, prized so much by his father, that Shah Jehan gave as patterns to the workmen."[65]

N.C. Mehta made a similar observation independently, "I have no doubt that there was vital connection between the art of the Mughal painter and the stone-cutter—especially during the reigns of Jehangir and Shah-Jehan. One has only to see their workmanship to be convinced of the underlying affinity."[66] The two arts are so similar that there can be little doubt about the one inspiring the other. No less an authority than Percy Brown also noticed it and remarked, "This form of embellishment by means of a broad border of foliated design is common in the Mughal miniature but seems to have been specially

65. *Cf. Essays on Indian Art, Industry and Education,* (Madras) pp. 17-18. Havell reiterated his stand, "In Shah Jahan's palace and in the Taj they went a step further and imitated the more naturalistic treatment of Persian fresco painting and other pictorial art" *Cf. A Handbook to Agra and the Taj,* (Calcutta, 1912) p. 90. And "the designs of the jewelled inlay were evidently inspired by the borders of the pictures painted by the court painters of the time," *Cf. A Handbook of Indian Art,* (London, 1927) p. 142 footnote-1.

66. *Cf. Studies in Indian Painting,* (Bombay, 1926) p. 84.

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developed by the artists of Jehangir's court. Its counterpart may be seen in the lapidary work of the Taj at Agra and other buildings of this period decorated with an inlay of precious stones, for the two arts are similar in colour and design though differing in technique."[67]

While paying glowing tributes to the beauty of some of the decorative details, particularly the coloured lapidary of the Taj, which has never been equalled, he again observed, "And in these delicate patterns of precious stones there is much that is reminiscent of the contemporary art of the painter for the same motifs may be seen in the designs on the inlaid alabaster as on the flowered borders of the miniatures....in technique only do the two crafts differ, in the one the effects were obtained by coloured stones in the other by pigments and burnished gold."[68] Much of the ornamentation of the Taj-Mahal owes its beauty and grace to this aspect of Mughal art.

A close study of the evidence *in situ*, viz., the monuments, thus reinforces the view that this mural ornamentation derived its inspiration from the miniature painting. We meet with Mughal miniatures translated into the dados of the Khwabgah at Fatehpur Sikri, built about 1575. Absolutely similar is the dado decoration of the palace of Mariam Zamani. These mural paintings not only borrowed the colours, subjects and landscapes from miniature art but also adhered to the general scheme of the latter.[69] The Sultana's palace at Fatehpur Sikri has dados which unmistakably depict forest scenes of miniature paintings. Here the landscape has been marvellously translated into stone in low relief. The typical border (hashiyah) of the Mughal miniature had not yet developed and this is, therefore, absent in these dados.

This border first appeared at the Tomb of Akbar (1605-12) and the event coincides with the development of Mughal miniature-art under Jehangir. White marble dado-panels with

67. *Cf. Indian Painting, op. cit.* p. 84.
68. *Indian Painting under the Mughals, op. cit.* p. 91.
69. The intimate relationship of the two has been noticed by Percy Brown, "And among the arts, called in to assist in making Akbar's palaces the most beautiful of their age was that of mural decoration. As soon as the mason's work was finished, expert painters were called in to design and execute pictures on the interior walls of many of the palace walls and living rooms" *Cf. Indian Painting under the Mughals op. cit.* p. 61.

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beautifully inlaid borders were used in the second storey halls of the Eastern, Western and Southern (main) gateways of this tomb.[70] Three such panels have survived the ravages of time and man at the Western gateway. Each white marble dado is defined by black marble lines to present it dominantly on a wall of red sandstone. The white marble slab is quite plain except on the border which is excellently inlaid in a beautiful conventional floral pattern (Plate CLVI). Black marble and abri stones of chocolate-grey-yellowish colour have been used for inlaying.

Similar inlaid borders were used on the dados at the Tomb of Itmad-ud-Daulah, which was begun in 1622 (Plate CLVII). Here, however, the design is so densely spread that the floral border has become almost ineffective. It is here, therefore, that the Mughal decorator learnt the value of plain surfaces in marble constructions. He realized that the ornamentation should be sparsely distributed and the inlay, to be properly presented, should be neighboured by blank space. Over-profuseness is destined to spoil its charm. The inlaid border at the Tomb of Itmad-ud-Daulah has lost its individuality and has been completely submerged in the geometrical pattern which it was originally meant to outshine.

Marble dados with inlaid border were consequently used with improved effect at the Musamman Burj in Agra Fort. This was constructed during the early regin of Shah Jehan, probably just after his accession. Bordered panels appear on all the dados in the central octagonal chamber, the corridor surrounding five sides of it and in the western dalan (Plate CLVIII) where a beautiful lotus-basin with a water fountain is sunk in the pavement. The centre of the dado is filled in with carved plants in natural bands and curves. The plants are in two series, one over the other. The border is inlaid with rare stones in pleasing tints in highly conventionalized floral patterns, exactly like the miniature-hashiyahs. The curves are rigid and instead of natural bands and twists there is strict repetition. Chinese cloud-forms appear on the dados of the dalan. Some plants are essentially local, while the hashiyahs are unmistakably Persianized.

70. Only the South gateway is functional, the other three are merely ornamental.

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The borders on the dado-panels at the Diwan-i-Khas of Agra Fort, though also conventionalized, are far more refined and sophisticated (Plate CLIX). The space for inlay has very carefully been selected leaving adequate plain surfaces. Carved vegetational designs have been harmoniously associated with this inlay, which is executed with unmistakable artistic vision and a keen aesthetic sense. The selection of coloured stones, as much as the selection of the pattern, deserves an unqualified tribute; nowhere does the embellishment appear monotonous, extravagant or tiresome. Nowhere, does the inlay appear over-enthusiastic, a defect from which he might have suffered most during the Golden period. He was always as cautious as a painter is when he portrays a natural scene with the minutest precision. This is how dado-art developed to such a grand and sophisticated ideal of aesthetic expression in Mughal architecture.

The inlaid border at the Taj Mahal marks the perfect stage from which the art could only decline. The artist most judiciously distributed the inlaid borders on the dados of the exterior portals (Plate CLX) and in the interior hall. He removed, at the Taj Mahal, the chief defect of the dados of the Diwan-i-Khas : instead of using a double series of plants, one over, the other, which spoils the uniformity and rhythm, he used here, e.g., on the dados of the octagonal mortuary hall (Plate CLXI), a single beautiful vase-and-foliage pattern composed of slender twigs, twisting leaves and bold flowers, emerging gracefully from a Hindu kalaśa. The carved pattern combines majestically with the inlaid border which is of a highly conventionalized pattern with set curves and twists. Perfectly appropriate stones are used to present the different tints of the pattern. The effect has been calculated with precision and due emphasis has been allotted to each inlaid flower and leaf. The border provides a delicate framing to the kalaśa-plant; the latter with its more arresting effect blends magnificently with the former. The co-relation between the art of chiselling and the art of inlaying is most pleasing. Each dado is presented splendidly like a Mughal miniature ! The border occupies the same significant position on the dado as it does in a miniature. The inlay ornament of the Mughal dado is a faithful translation into marble and precious stones of the lovely borders which framed Mughal

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miniatures. There is hardly any doubt that this aspect of Mughal architectural ornamentation received great impetus from the contemporary art of painting; it is from this source that it derived most of its impressiveness and grace.

That an art inspiration may be introduced into a style and reintroduced after more than a millennium through a different medium to be developed to such magnificent proportions, is an almost miraculous phenomenon of the History of Art. It gives an idea of the evolution which takes place quietly, and unconsciously, beneath the moving surface, once taboos and inhibitions are relaxed and liberal patronage is accorded by a prosperous, powerful regime.

The white marble dado of the Mughals depicts the naturalistic motif in the centre while the design in the border is conventionalized. The former represents the realistic approach to art, the latter the idealistic. The Mughal dado is thus representative of the compromise between these two extreme aesthetic norms which the age of the Grand Mughals brought about.

It is here that we again meet with the traditional stone-artist of India who chiselled the lively sculptures of Khajuraho in one art-epoch and these wonderful bas-reliefs of the Taj-Mahal in another ! Each stands as a great work of art, unrivalled by any other example of its type in the world.

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APPENDIX A

CHRONOLOGY OF THE MUGHAL MONUMENTS

A.D.	
1530	Humayun built a mosque at Kachhpura Agra near Gyarah Siddi.
1564-70	Tomb of Humayun built at Delhi by his widow Haji Begum.
c. 1564	Tomb of Muhammad Ghaus built at Gwalior.
1565	Akbar began the reconstruction of the Fort of Agra.
1568-69	Delhi-gate of Agra Fort completed.
c. 1568	Stone-Cutters' Mosque built at Fatehpur Sikri.
1571-72	Jami Masjid of Fatehpur Sikri completed.
1571-82	Building of other palaces of Fatehpur Sikri, e.g., Birbal's palace, Jodhbai's palace, Panch-Mahal, Diwan-i-Khas, Sultana's palace and Hammams.
1571-81	Tomb of Salim Chishti built at Fatehpur Sikri.
1601	Buland Darwaza built at Fatehpur Sikri.
1605-12	Akbar's Tomb built at Sikandara Agra (completed by Jehangir).
1622	Jehangir built his mother's (Mariam-uz-Zamani's) Tomb at Agra.
1622-27	Tomb of Itmad-ud-Daulah built by Nur Jehan at Agra.
1628	Tomb of Abdur-r-Rahim Khan-i-Khanan built at Delhi.
1628-30	Shah Jehan built Musamman Burj in Agra Fort.
1635	Shah Jehan built Diwan-i-Khas of Agra Fort.
1631-40	Shah Jehan built Khas-Mahal, Shish-Mahal, Mina-Masjid, Nagina-Masjid, and Diwan-i-Am in the Agra Fort.
1630-39	Chini-ka-Rauza built by Shukrullah Shrirazi entitled Afzal Khan at Agra.
1631-48	Shah Jehan built the Taj-Mahal.
1638-48	Shah Jehan built palatial mansions in the Red Fort Delhi.

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1640-47	Tomb of Firoz Khan Khwajasarai built at Agra.
1644-48	Jahanara built Jami Masjid of Agra.
1648-54	Shah Jehan built the Moti Masjid of Agra Fort.
1650	Jami Masjid of Delhi built by Shah Jehan.
1659	Moti Masjid of Red Fort Delhi began by Shah Jehan was completed by Aurangzib.

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APPENDIX B

SOME TYPICALLY ISLAMIC ARCHITECTURAL TERMS

ʻĀj	—Ivory
Amūd	—Capital (of pillar)
Bāb	—Gate
Baoli	—Step-well
Billawr	—Crystal
Binā	—Building
Burj	—Tower
Bustān	—Garden
Dār	—Dwelling-House
Fakhkhār	—Potter's Craft
Fann	—Art
Fusayfisa	—Mosaic
Hammam	—Bath
Irq al-Lulu	—Mother of Pearl
Iwān	—Portal, Arcade
Khaṭṭ	—Calligraphy
Khazaf	—Pottery and Ceramics
Manāra	—Minaret
Maqbarā	—Tomb
Muqarnas	—Stalactite
Taswir	—Painting
Tawriq	—Arabesque

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APPENDIX C

SOME ILLUSTRATIVE EXAMPLES OF ANIMATE MOTIFS USED ON ISLAMIC POTTERY, FAIENCE, GLASS, TEXTILES AND BROCADES

(1) Pottery bowl from Nishapur (10th century A.D.) showing a man on horse, with birds and animals;
(2) Bowl from Nishapur showing a bird;
(3) Bowl from Susa (9th century) with birds, stags and lions.
(4) Bowl from Susa (9th century) showing a human-headed animal;
(5) Bowl from Susa showing a duck;
(6) Dish from Kashan (1210) Prince Khusrau and Shirin bathing;
(7) Dish from Rayy (12th century) Horseman;
(8) Bowl from Kashan (14th century) Human figures;
(9) Bowl from Raqqa (13th century) Fish;
(10) Bowl from Raqqa (13th century) Peacock;
(11) Bowl from Fostat (13th century) Duck;
(12) Glass Mosque-lamp from Syria (1340) showing an eagle in between inscription;
(13) Silk textile from Persia (16th century) showing warriors leading prisoners;
(14) Brocade from Persia (16-17th century) showing birds among flowers. (*Cf.* D.T. Rice, *Islamic Art*, (London, 1965) figures 43, 45, 62, 63, 64, 65, 66, 123, 129, 130, 132, 135, 241 and 242 respectively).

G. Marcais (*Cf. The Encyclopaedia of Islam*, Vol. II 1965 ed., p. 746) specifically mentions the ornamentation of the pottery-ware of Persia which was "produced by means of larger or smaller scratches in the slip that covers the body under the transparent partly coloured glaze," consisted of, "schematic representations, recalling the ancient culture of Persia, notably of fire altars, as well as figures of men and beasts, birds, lions and dragons depicted in a curiously stylized manner." He again cites (*Cf. ibid.* p. 864) a few important examples of the Fatimid art of this class preserved in the Cairo Museum. They

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include friezes in carved wood (showing musicians, dancers and hunters) ewers and fountain motifs in bronze (shaped as animals) gilded faiences (showing human beings) and brocades (showing confronting animals). Figurines (known as tamā-thīl) represented elephants, gazelles, lions, giraffes, peacocks and other birds. Marcais notes that tents of the Fatimid Caliphs and their viziers were decorated with 'suwar adamiyya wa-wahshiyya' (pictures of human beings etc). Marcais ascribes this depiction to two sources—"the legacy of Persia which the common faith united with the masters of Egypt and....the Hellenistic legacy handed down by the Copts," who left their deep imprint on the Fatimid art.

Andre Godard, *The Art of Iran*, (Heron and Rogers) (London, 1965) fig. 175 shows such designs on silk and colour Plate-IV on carpet (16th century). His Plate 172 shows a bronze perfume-burner (12th century) shaped as a fantastic animal.

In the inventory of the treasure of Mostanser-billah there figure those pieces of silk tissues of gold, which gave the order of the different dynasties of the Arabs with the portraits of the Caliphs and of famous men. The tent of the Vizier Yazoury called the 'Great Round' was illuminated with the figures of men and animals. While others were adorned with the most beautiful paintings representing elephants, lions, horses, peacocks and birds of every sort : a peacock of gold enriched with precious stones, a cock of the same metal with eyes of rubies, a gazelle whose body was covered with pearls and a number of other animate figures, painted, sculptured or woven so perfect that at a distance one would have believed they were real (*Cf.* Al-Gayet, *op. cit.* p. 184). A number of tapestries of this class have also been mentioned (*Cf. Ibid.* p. 186).

The oldest known sculpture is the bronze griffon of Pisa which was brought to Italy at the time of the crusades by the King Amaury. The piece is remarkably reminiscent of these hybrid couplings so dear to the genius of Egypt. The body is that of a lion and the head of an eagle. Over the crupper is thrown a saddle cloth to which are attached four shields reproducing alternately the forms of an eagle and a lion. The breast of the monster is covered in a coat of mail and to complete the ensemble two wings are attached to the join of the saddle cloth with the

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thing itself, bristling with boucle feathers arranged in successive rows (*Cf.* Al-Gayet, *op. cit.* p. 186).

Figure 192 of M. S. Dimand's *A Handbook of Muhammedan Art* (New York, 1958) depicts a woollen rug from Ardabil (Iran) of the 16th century. The pattern shows a repeat motif of a lion and tiger attacking a Chinese Kilin and other animal motifs along with floral scrolls and Chinese cloud bands on the border.

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APPENDIX D

A FEW REPRESENTATIVE EXAMPLES OF THE DEPICTION OF TCHI (CLOUD-FORMS) IN CHINESE ART

(1) Wall Painting in Tsao-Yuan-tsun tomb of the Han Dynasty (221 B.C.—220 A.D.) showing landscape. Dragon and tiger have been depicted among the clouds. Suggestion of mist and distance is writ large.[1]

(2) Engraved stone Sarcophagus (520-550 A.D.)—landscape showing mountains and clouds in highly stylized forms.[2] Sullivan notes, "There is a wonderful feeling of the life of nature in the swaying trees, scudding clouds, and birds fleeing panic-stricken from the flames."[3]

(3) Lacquer work on a wooden piece of the 8th century A.D. Tang style landscape depicting cloud-forms.[4]

(4) Lacquer work on the back of a mirror of the first half of the 8th century A.D. showing dragons in clouds.[5]

(5) A painting by Fan Kuan, showing lively rocks and trees, a representation of 'chi-yun'.[6]

(6) A painting dated 1072 by Kuo-Hsi depicting cloud forms. Noted for painter's mastery of depth both visual and atmospheric.[7] Sullivan observed "the cloudy mountains and mountainous clouds of a Mi Yu-Jan vividly suggest the mysterious life of nature, the very chi (life-breath) or shen (spirit) that had been enshrined centuries before in the First Principle of Hsieh Ho, and in the writings of Ku Kai-Chih."[8]

(7) A landscape painting of mid-13th century by Mu-Chi.[9] The mist from which the forms of mountains and trees emerge

1. *Cf.* Sullivan, *op. cit.* Fig. 19E.
2. *Ibid.* Fig. 22B.
3. *Ibid.* p. 23.
4. *Ibid.* Fig. 39B.
5. *Cf.* Werner Speiser, *op. cit.* Plate on p. 133.
6. Sullivan, Colour Plate-162.
7. *Ibid.* Colour Plate-166.
8. *Ibid.* p. 47.
9. *Ibid.* Colour Plate-176.

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and into which they blend evokes the atmosphere of a lakeside "and, on a deeper scale, it is the visible manifestation of the chi or life breath that is the belief of the Chinese mystic animates nature."[10]

10. *Ibid*, p. 63.

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APPENDIX E

A FEW REPRESENTATIVE EXAMPLES OF THE DEPICTION OF KILIN (CHINESE CLOUD-FORMS) IN PERSIAN PAINTING

(1) Miniature depicting Siege-scene showing kilin.[1]

(2) Illustration from Miraj-Nama dated 1436 showing kilin.[2]

(3) Illustrations from Shah-Nama done at Herat about 1440 showing kilin.[3]

(4) Miniature dated 1475—landscape depicting kilin.[4]

(5) Miniature entitled 'Khusrau sees Shirin bathing in a Pool' by Sultan Muhammad copied around 1539-43—contains a number of kilin.[5]

(6) Miniature entitled 'Prophet Muhammad.' Here the Chinese clouds almost fill the whole miniature.[6] As the Prophet travelled through the sky, the clouds had necessarily to be depicted and the artist took recourse to this impressive expedient.

(7) Illustration from 'Laila-Majnun' painted by Mir Sayyid Ali around 1539-42. Kilin in the background.[7]

(8) Miniature entitled 'The Sleeping Rustam with Rakhsh killing the Lion' depicting kilin.[8]

(9) Miniature entitled 'The Sleeping Rustam' shows kilin.[9]

1. Doughlas Barrett, *Persian Painting of the 14th century*, Plate-1, (p. 6).
2. D.T. Rice, *op. cit.* Plate 221. It was only in Persia that any attempt was made to depict the story and physiognomy of the Prophet or to illustrate his life with miniatures.
3. *Ibid.* Plate 224.
4. Basil Gray, *Persian Painting*, (Iris Book Series) Plate-7.
5. *Ibid.* Plate 11.
6. *Ibid.* Plate 12.
7. Percy Brown, *Indian Painting Under the Mughals, op. cit.* Plate VI.
8. B.W. Robinson, 'Origin and Dates of Three Famous Shahnamah Illustrations', *Ars Orientalis*, Vol. I (Smithsonean Institute, Washington) Fig. 1.
9. *Ibid.* Fig. 4. Also Figs. 6,7,11,12,14,17 to 19 (hunting scenes etc).

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(10) Miniature entitled 'Bizhan hunting the Boar' from Ibrahim's Shahnamah showing kilin.[10]

(11) Illustration from Khamsa of Nizami done for Shah Tahmasp (1539-43) showing kilin.[11]

(12) Miniature from Khamsa by Mir Sayyid Ali showing kilin.[12]

(13) Miniature from Kalila and Dimna, kilin in the background.[13]

(14) Miniature from Kalila and Dimna showing kilin.[14]

(15) Miniature also from Kalila and Dimna showing kilin in the background.[15]

(16) Miniature from Khamsa of Nizami (16th century) kilin in the background.[16]

10. R. Pinder Wilson, *Painting from the Islamic Lands*, Plate on p. 80.
11. D.T. Rice, *op. cit.* Plate 230.
12. *Ibid.* Fig. 231.
13. Basil Gray and Andre Godard, *Iran, op. cit.* Plate X.
14. *Ibid.* Plate XI.
15. *Ibid.* Plate XIII.
16. *Ibid.* Plate XXVII.

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Annals of Oriental Research, Madras
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Bulletin of the Prince of Wales Museum of Western India, Bombay
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CORRIGENDA

Page	*Line*	*Instead of*	*Read*
97	footnote 26	Jairauchoy	—Jairazbhoy
,,	,, 27	K. A. Creswell	—K A. C. Creswell
,,	,, ,,	A. H. C. Christie	—A. H. Christie
,,	,, ,,	scular	—secular
98	19th line	Suria	—Syria
103	16th line	(500-500 A.D.)	—(500-550 A.D.
107	29th line	belived	—believed
108	23rd line	Din-Ilahai	—Din-i-Ilahi
109	fn. 69	delete all after p. 108	
110	22nd line	goddss	—goddess
111	1st line	delete—of glazed tiles—after friezes	
113	32nd line	scale in	—scale is
114	26th line	worshipded	—worshipped
116	18th line	delete in after was	
130	fn. 123 12th line	litearary	—literary
131	fn. 128 2nd line	Samarsa	—Samarra
134	fn. 7	R. S. Gupta	—R. S. Gupte
138	16th line	lose	—loose
,,	read in sub-head	title (d) instead of Techi	—Tchi
139	18th line	cuorsrily	—cursorily
,,	in continuation of fn. 24 read Sanskrit portion as follows:—		

रूपभेदाः प्रमाणानि लावण्य भावयोजनम् ।
सादृश्यं वर्णिकाभङ्ग इति चित्रं षडङ्गकम् ।।

149	1st line	(Plate *CI*)	(*Plate CL*)
155	25th line	regin	—reign
156	10th line	inlay	—inlayer

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FIGURES & PLATES

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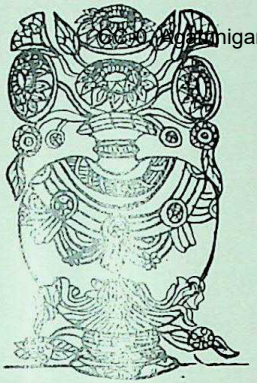

Fig. 1
Pūrṇakalaśa, Amaravati
(p. 9)

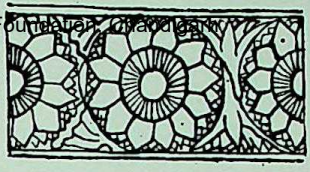

Fig. 2
Padma, Sanchi
(p. 12)

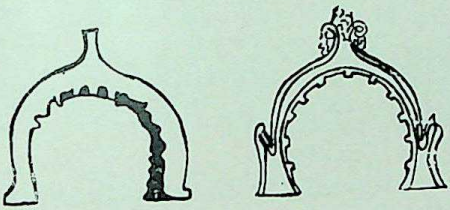

Fig. 3
Typical Hindu Gavākṣa
(p. 21)

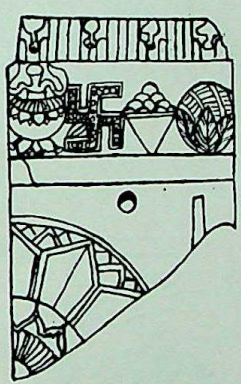

Fig. 4
Svastika, Mathura
(p. 25)

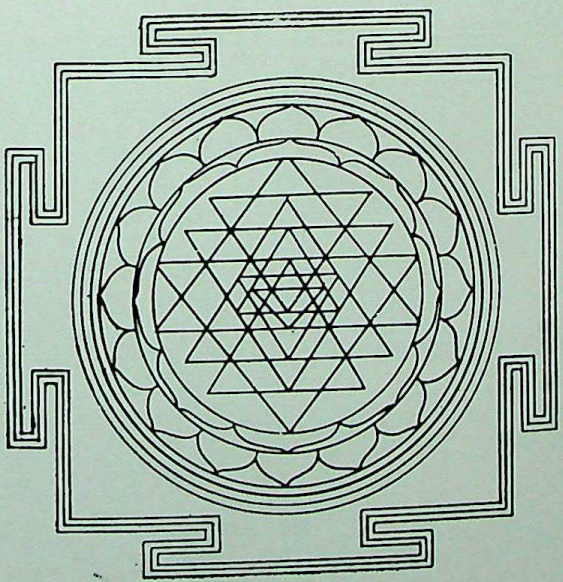

Fig. 5
Tantric 'Śrīyantra'
(p. 35)

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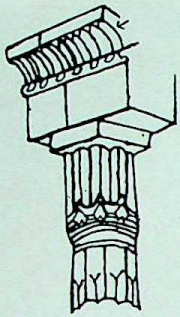

Fig. 6
Honey-comb Motif from Persepolis
(p. 61)

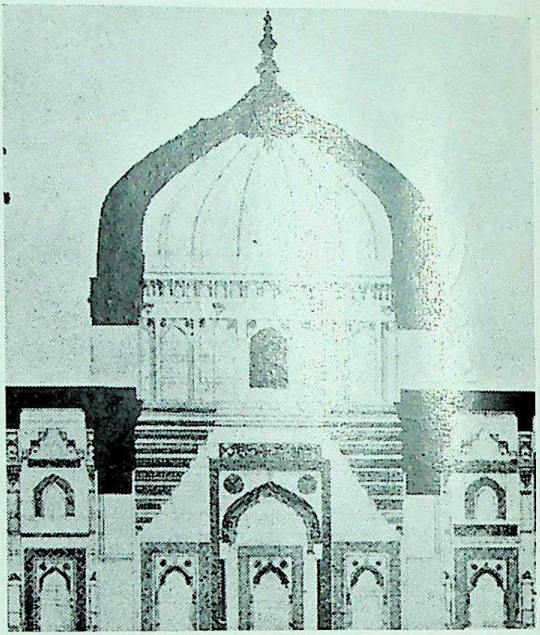

Fig. 7
Corbelled Pendentives in the phase of transition Jami Masjid, Fatehpur Sikri (p. 71)

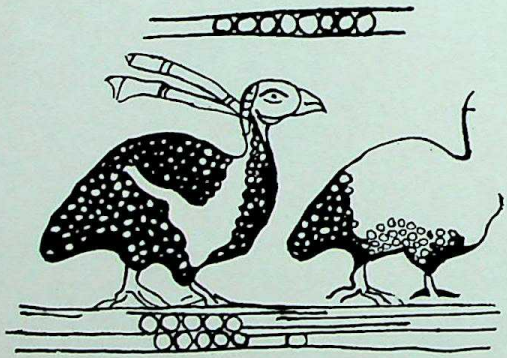

Fig. 8
Ducks from Samarra (833-41)
(p. 98)

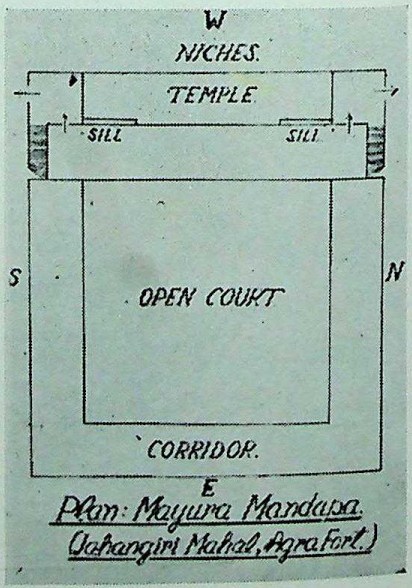

Fig. 9
Plan, Mayūra-Maṇḍapa, Agra Fort
(p. 113)

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Fig. 11
Vyāla (Sapakṣa-Mṛga), Sanchi
(p. 131)

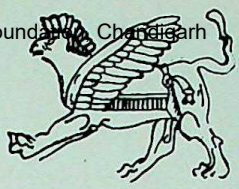

Fig. 10
The Assyrian Griffin
(p. 128)

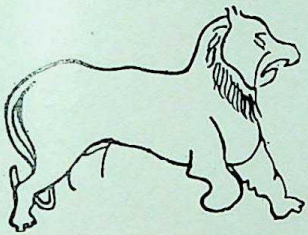

Fig. 12 *Vyāla (Griffin). Amaravati*
(p. 131)

Fig. 15
Typical Makara of the Hindu art
(p.143)

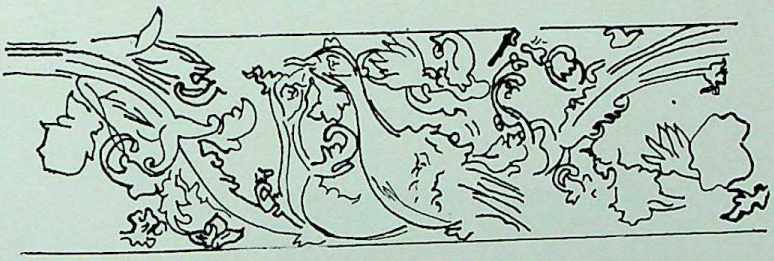

Fig. 13 *Creeper, Bagh* (p. 134)

Fig. 14
Wave, Bagh
(p. 135)

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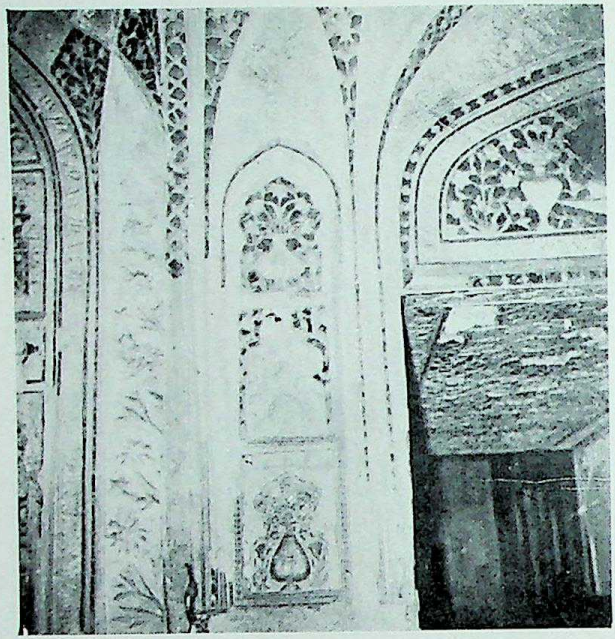

Plate I
Kalaśa, Shish-Mahal, Agra Fort
(p. 8)

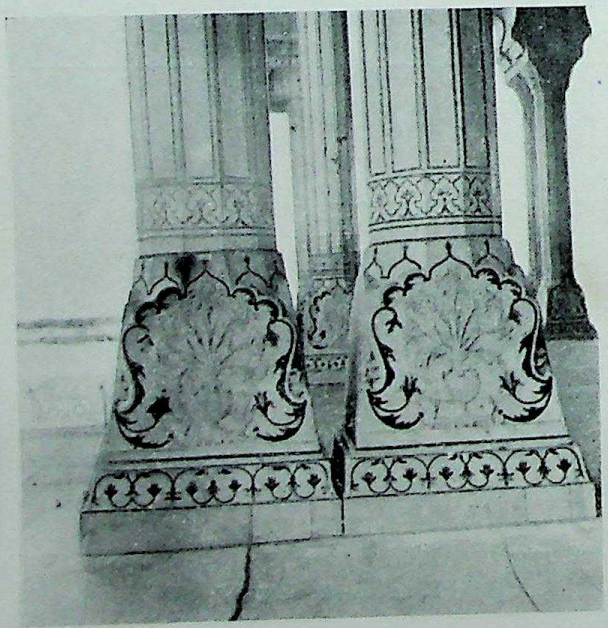

Plate II
Kalaśa-motif
(Vase & Foliage)
Diwan-i-Khas,
Agra Fort
(p. 8)

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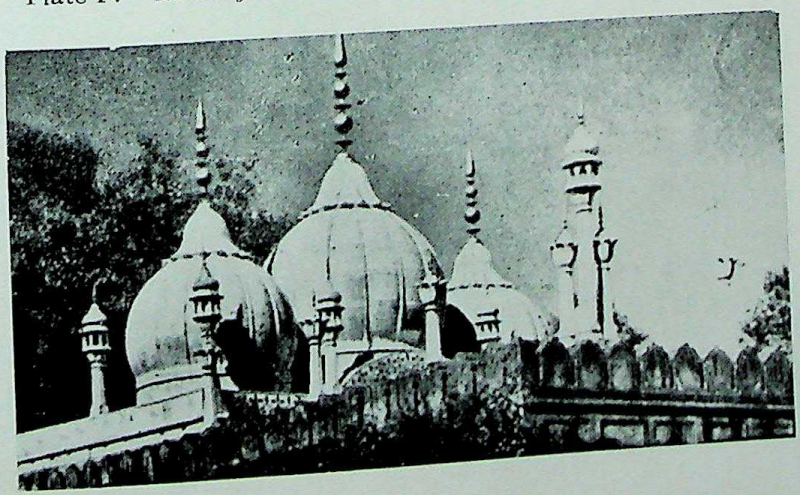
Plate III
Kalaśa motif
(*Vase & Foliage*)
The Taj Mahal
(p. 9)

Plate IV *Kalaśa finial, Moti Masjid, Red Fort, Delhi* (p. 10)



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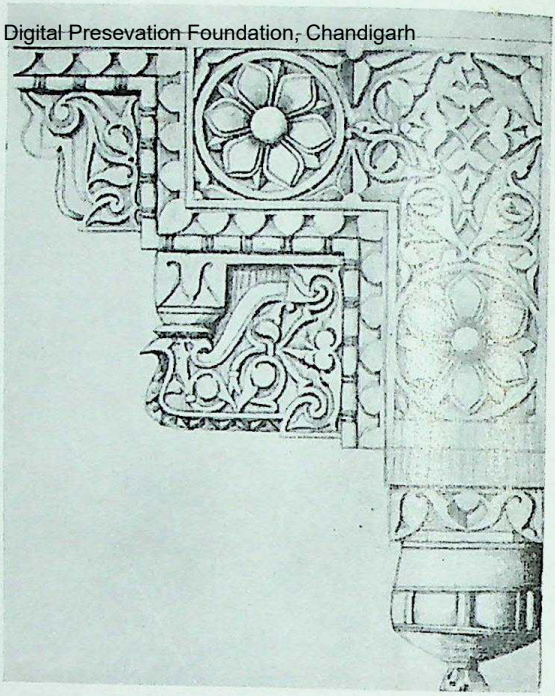

Plate V
Padma, Birbal's Palace, Fatehpur Sikri
(p. 13)

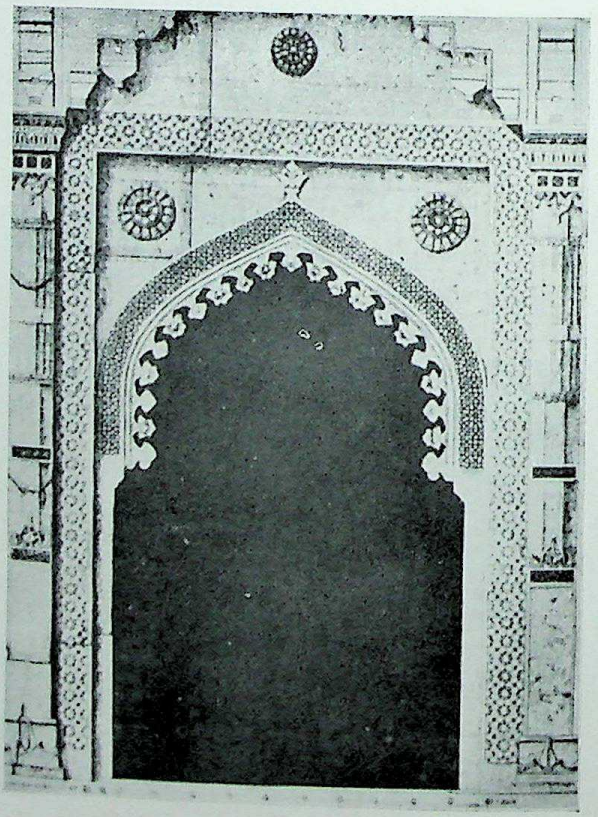

Plate VI
Fringe of Lotus-buds, Jami Masjid, Fatehpur Sikri
(p. 14)

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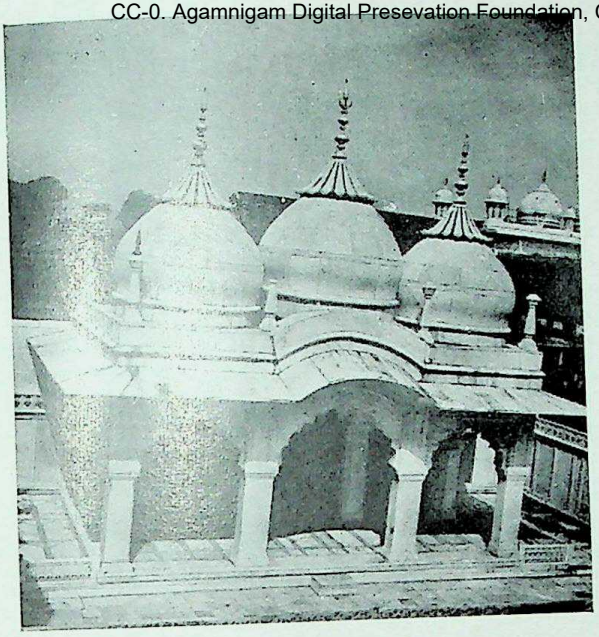


Plate VII
Padma-kośa,
Nagina Masjid.
Agra Fort
(p. 15)

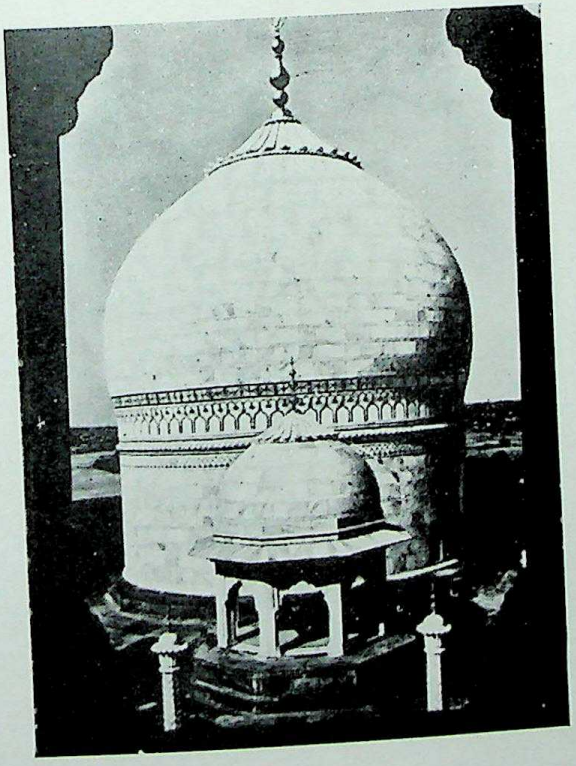


Plate VIII
Padma-kośa,
on the Taj-dome
(p. 15)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

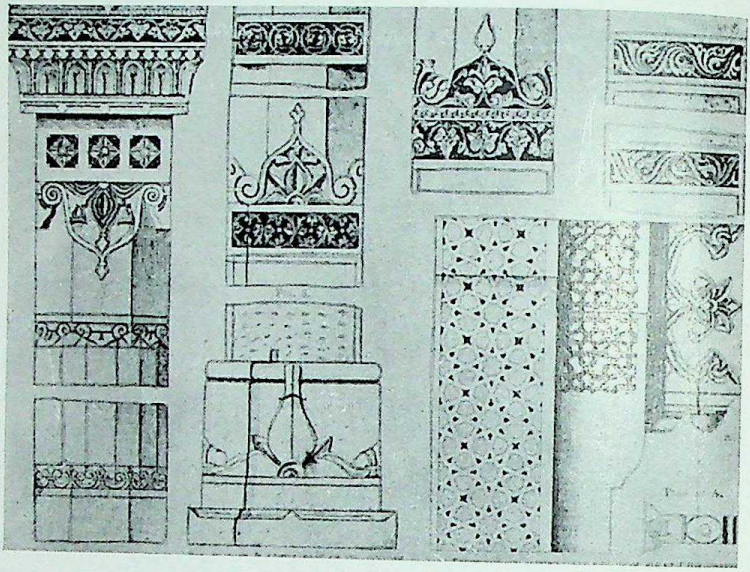
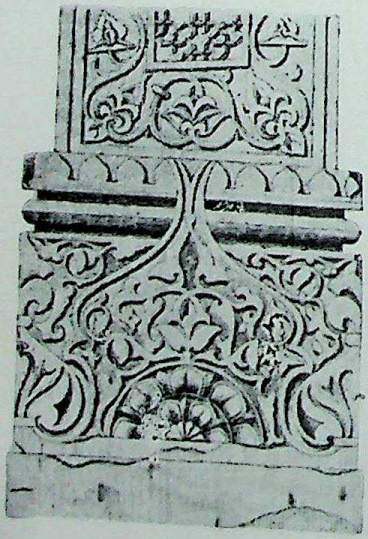
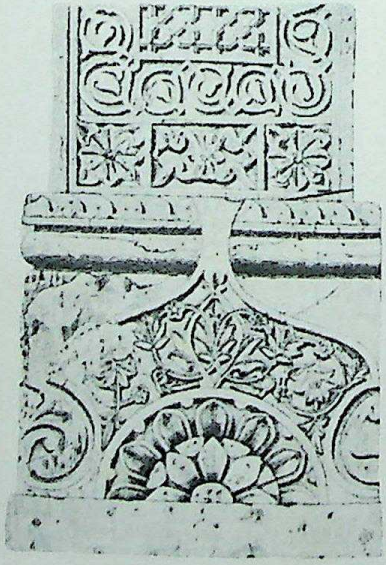


Plate IX *Gavākṣa, Jami Masjid, Fatehpur Sikri* (p. 19)

Plate X *Gavākṣa, Birbal's Palace, Fatehpur Sikri* (p. 19)





CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

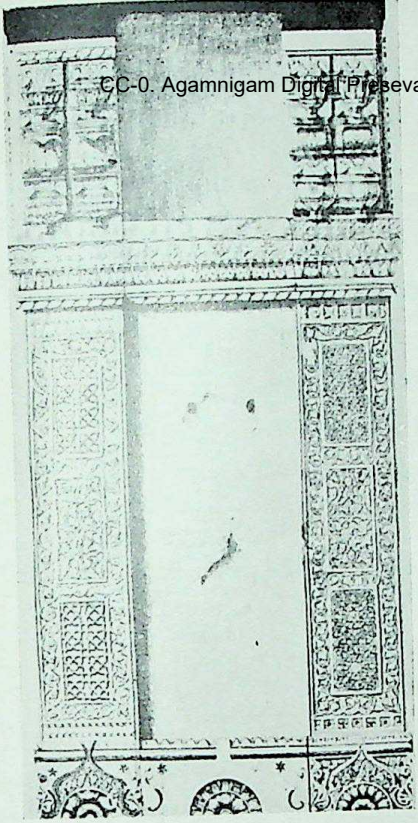
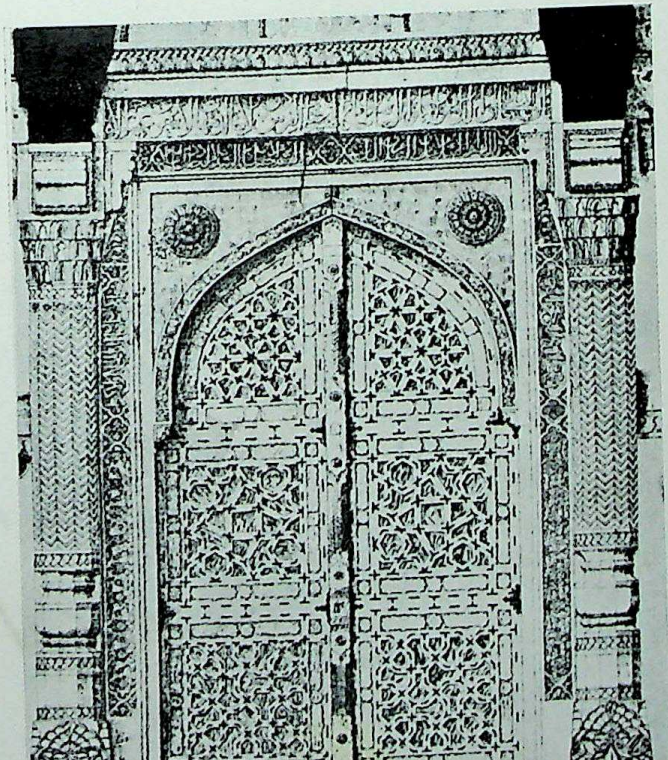


Plate XI
Gavākṣa, Birbal's Palace, Fatehpur Sikri
(p. 19)

Plate XII
Kīrttimukha, Salim Chishti's Tomb, Fatehpur Sikri
(p. 20)



CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

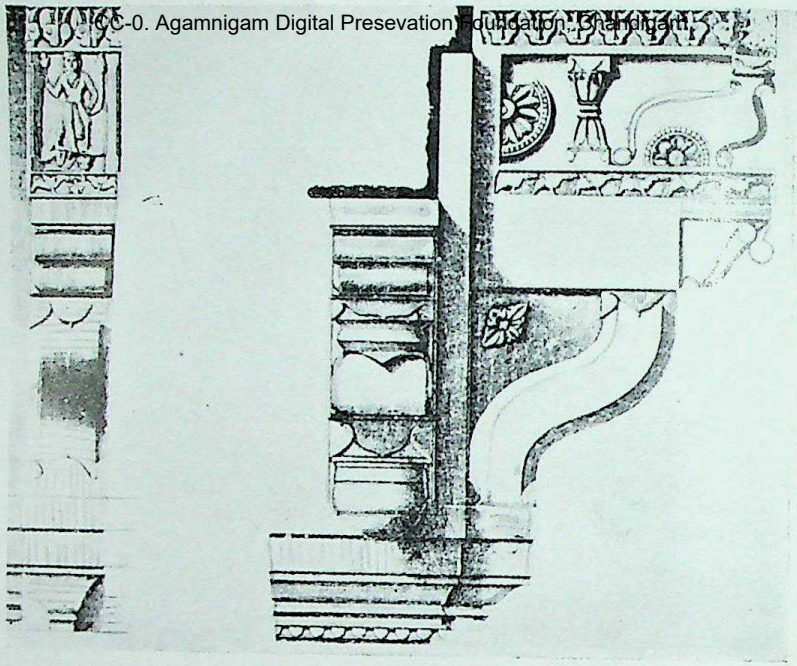


Plate XIII *Kirttimukha, Mariam's House, Fatehpur Sikri* (p. 20)

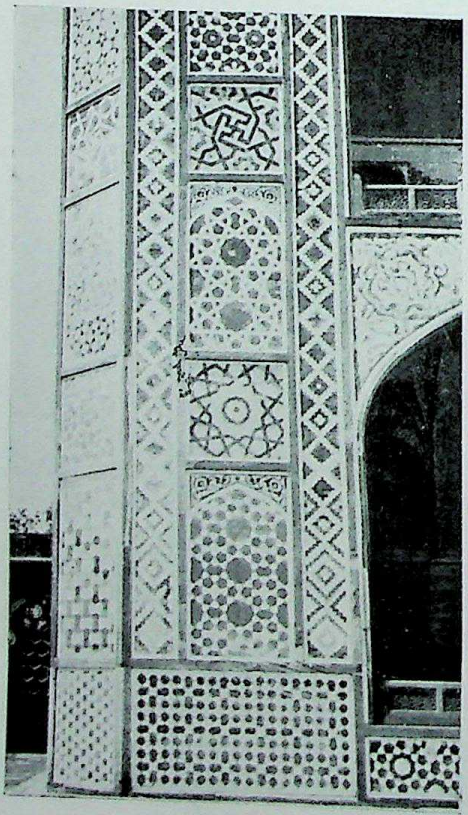


Plate XIV
Svastika, Main Gateway, Akbar's Tomb, Sikandara, Agra
(p. 20)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

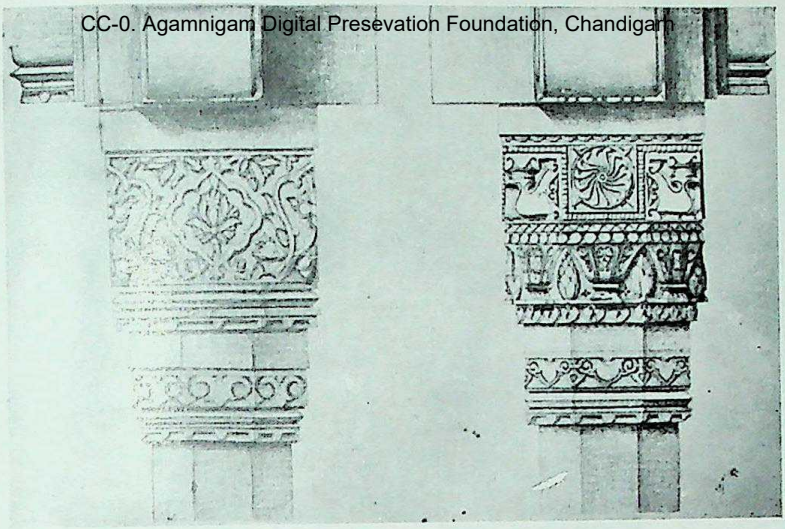


Plate XV *Cakra, Panch-Mahal, Fatehpur Sikri* (p. 28)

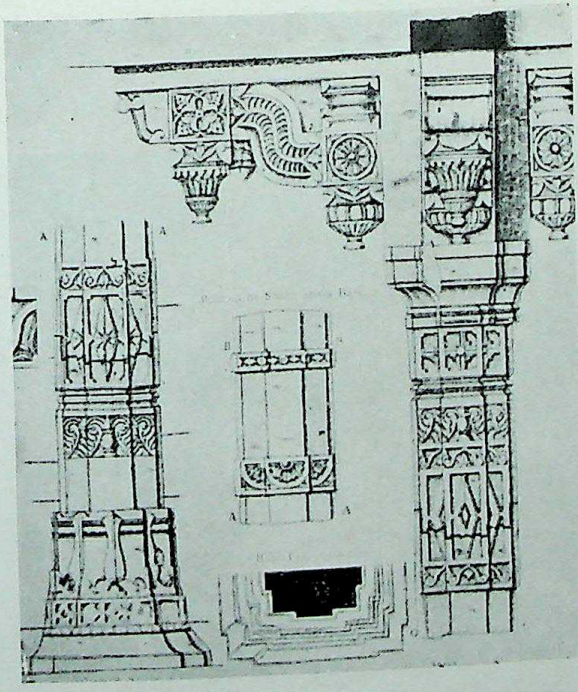


Plate XVI
Śrivatsa, so-called Jodhbai's Palace, Fatehpur Sikri
(p. 30)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

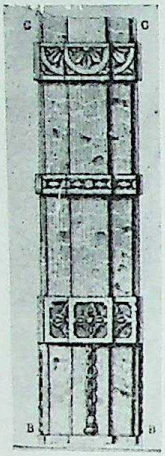


Plate XVII
Ghaṇṭāmālā,
(Bell & Chain)
Jodhbai's Palace
Fatehpur Sikri
(p. 31)

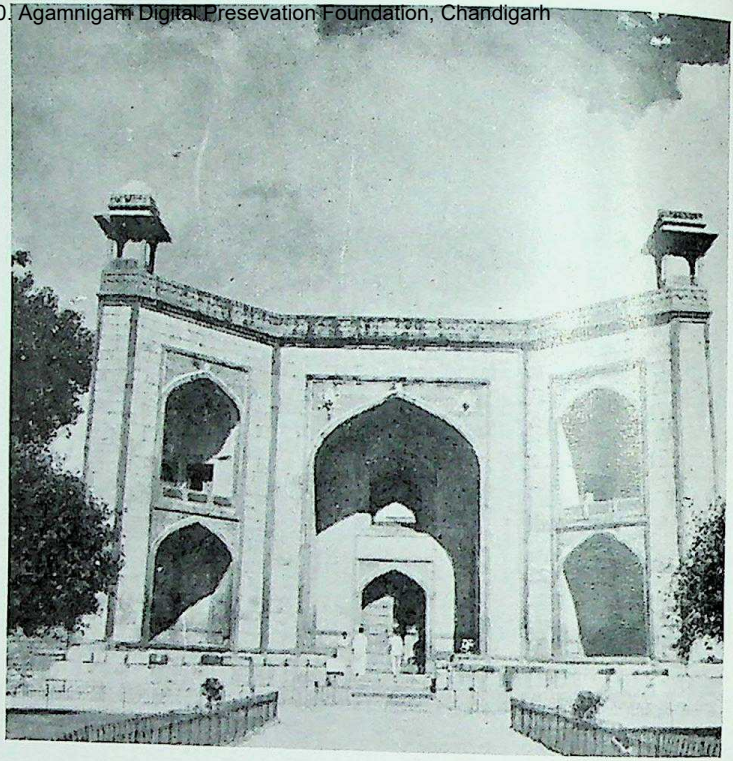


Plate XVIII *Ṣaṭkoṇa, Gateway, Humayun's Tomb, Delhi*
(p. 31)

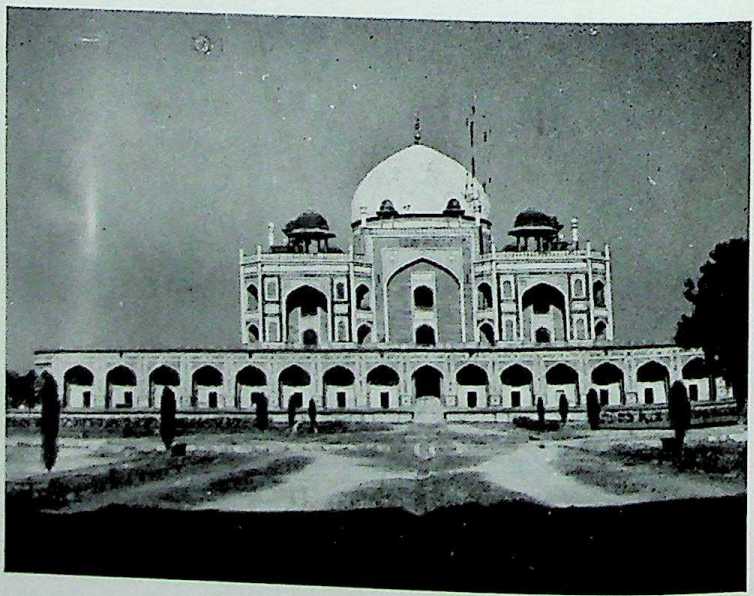


Plate XIX
Ṣaṭkoṇa
on facades,
Humayun's
Tomb, Delhi
(p. 31)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

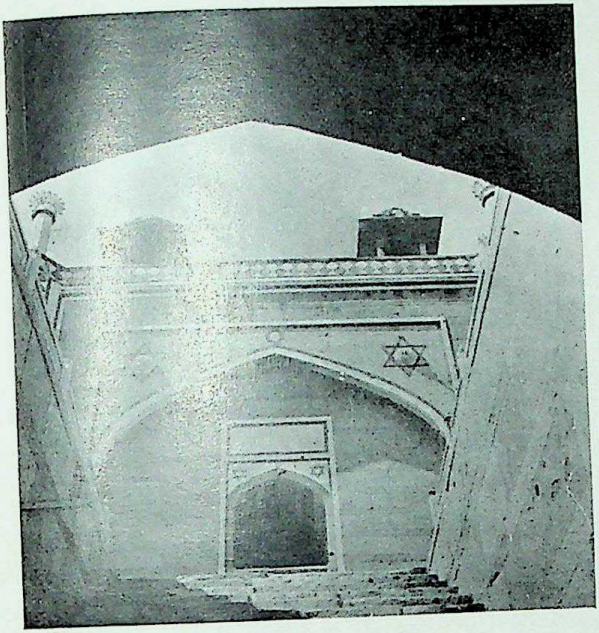


Plate XX
Ṣaṭkoṇa on facades, Humayun's Tomb, Delhi
(p. 31)

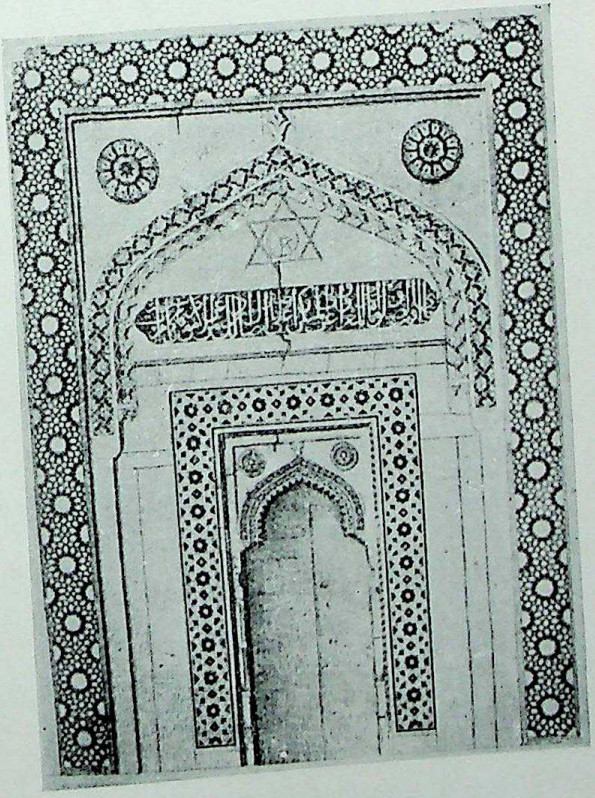


Plate XXI
Ṣaṭkoṇa over Mihrab, Jami Masjid, Fatehpur Sikri
(p. 31)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

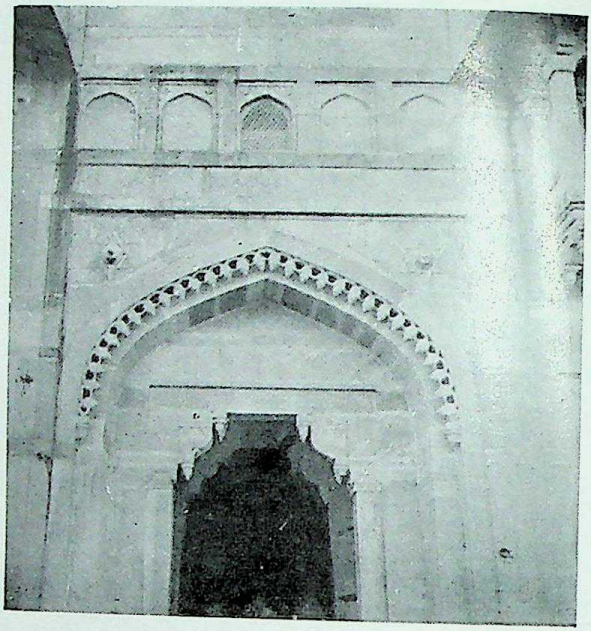
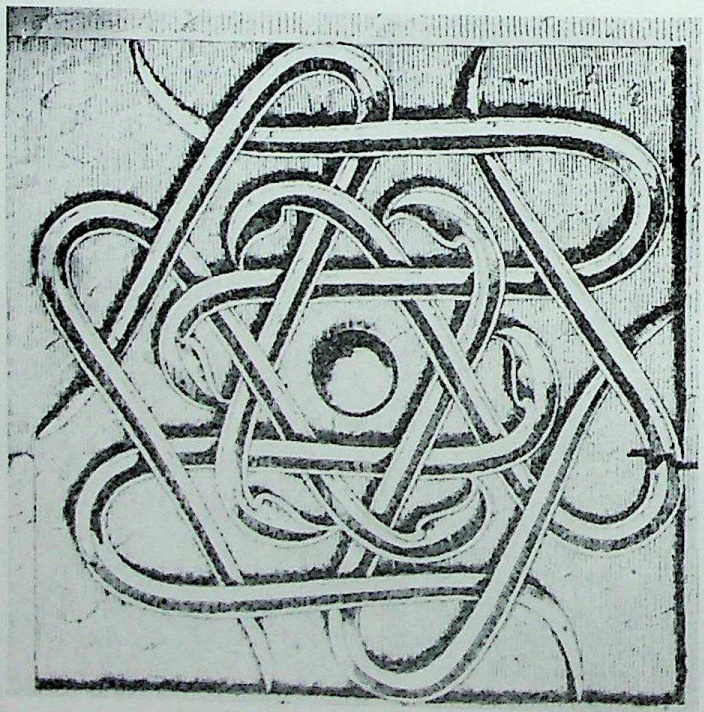


Plate XXII
Ṣaṭkoṇa, Main Entrance, Jodhbai's Palace, Fatehpur Sikri
(p. 32)

Plate XXIII *Nāga-pāśa (Ṣaṭkoṇa formed of six interlacing serpents) Salim Chishti's Tomb, Fatehpur Sikri* (p. 32)

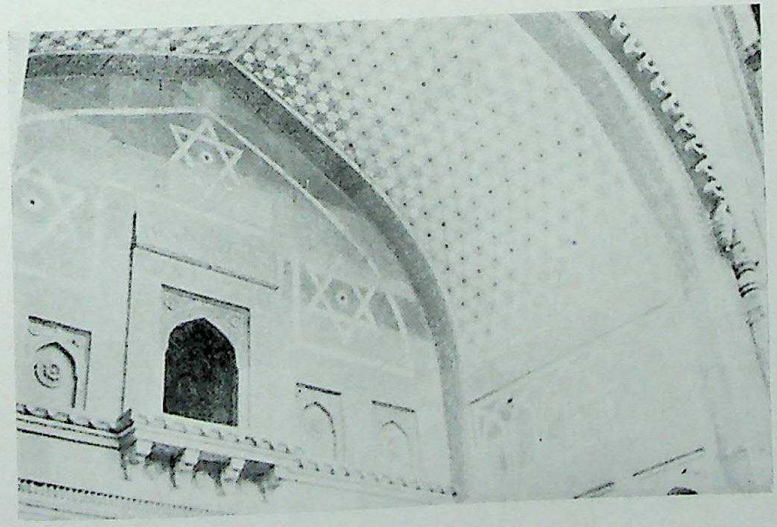


CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Plate XXIV

(a) *Ṣaṭkoṇa, Western Porch, Jehangiri Mahal, Agra Fort* (p. 32)

(b) *Ṣaṭkoṇa, Western Porch, Jehangiri Mahal, Agra Fort* (p. 32)



CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

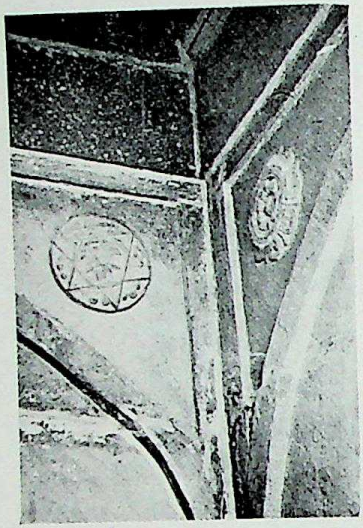


Plate XXV
Ṣaṭkoṇa, with peacock, Akbar's Tomb
(p. 32)

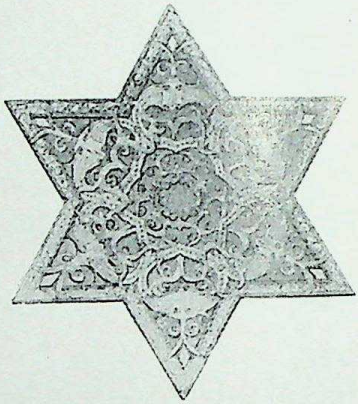
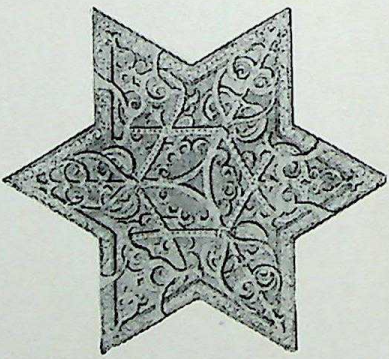


Plate XXVI
Six-pointed Star, Ghazni-Gate (now in Agra Fort)
(p. 33)



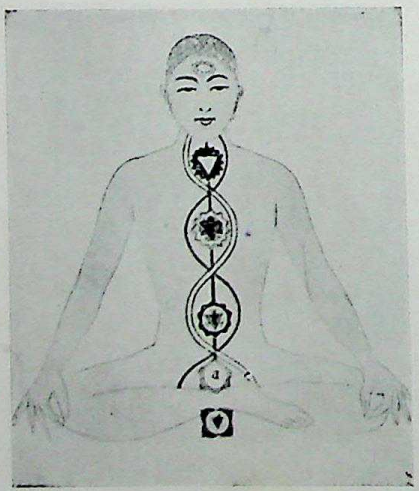


Plate XXVII
Ṣaṭcakra in the Human body
(p. 33)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

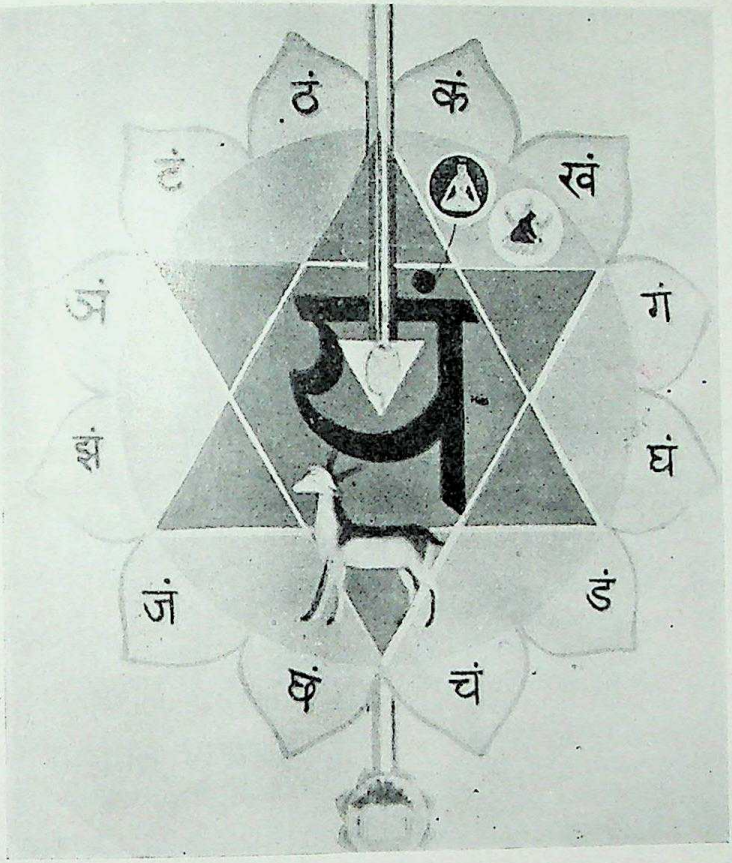
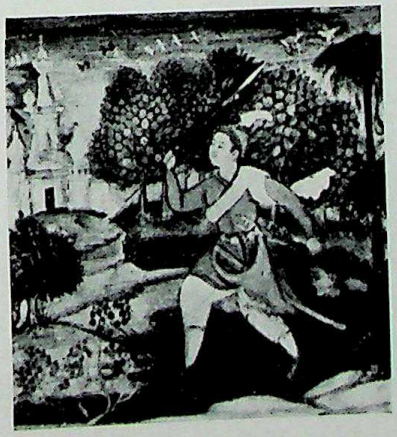


Plate XXVIII *Anāhata-cakra* (p. 36)

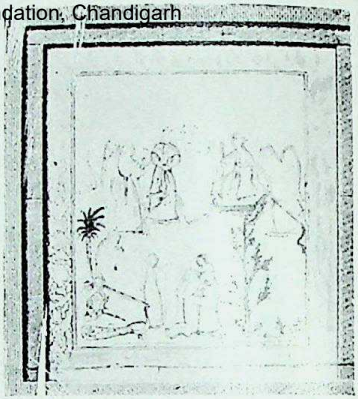
Plate XXIX
Miniature Painting of Akbar
(p. 42)

Plate XXX
Miniature Painting of Akbar
(p. 42)



CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Plate XXXI *Miniature Painting of Akbar*
(p. 42)



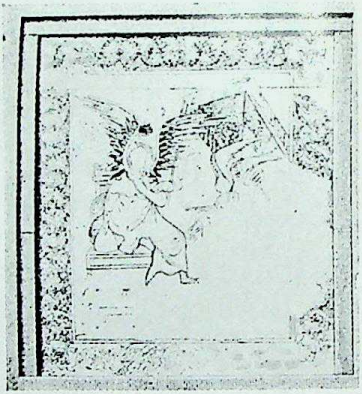


Plate XXXIII *Mural Painting, Mariam's House, Fatehpur Sikri* (p. 43)

Plate XXXII
Mural Painting, Khwabgah, Fatehpur Sikri
(p. 43)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

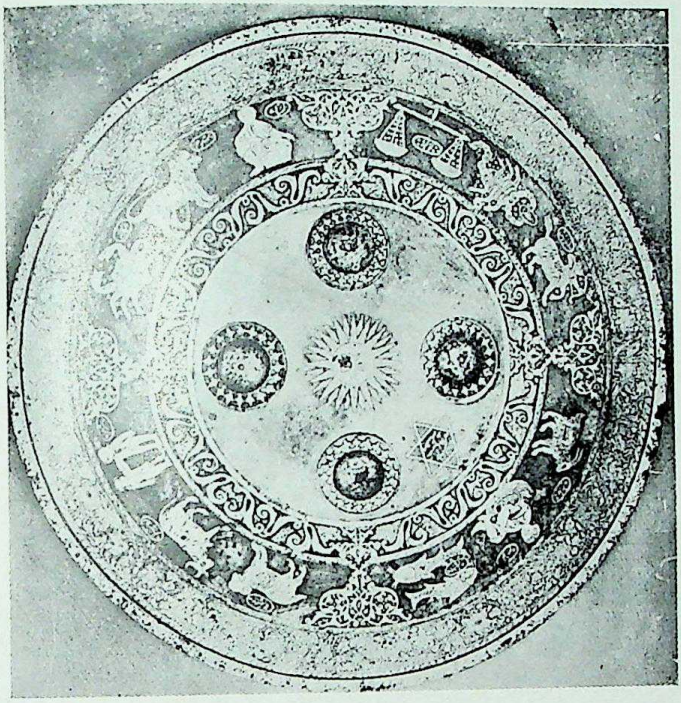


Plate XXXIV *Akbar's Shield, now in the Prince of Wales Museum, Bombay* (p. 43)

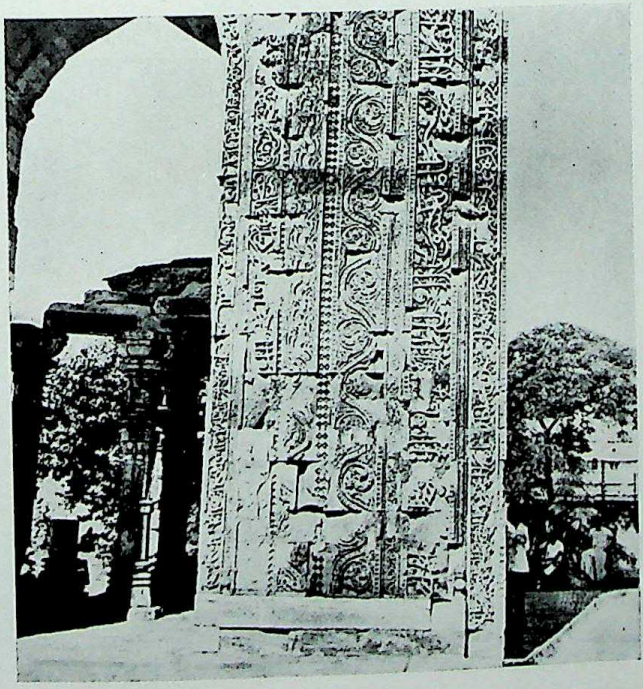


Plate XXXV *Arabesque design, Qutub Mosque, Delhi* (p. 55)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

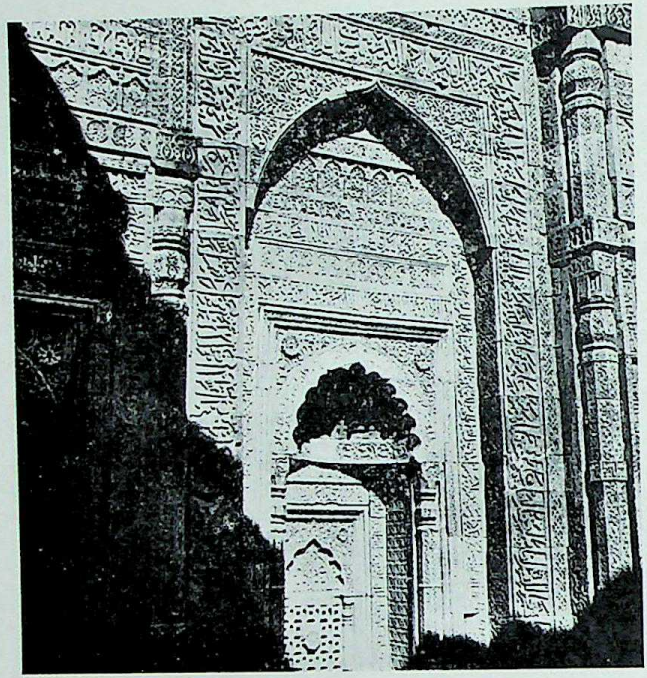
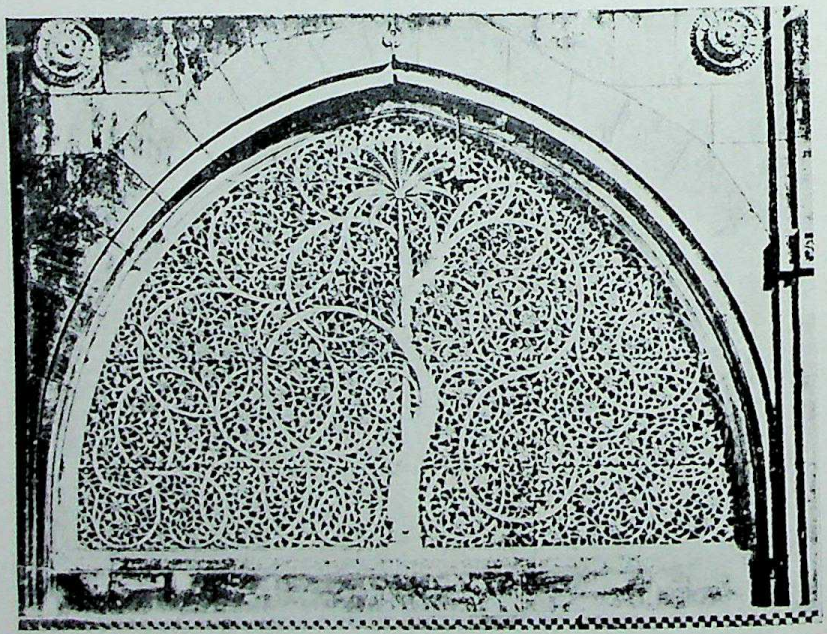


Plate XXXVI
Arabesque design, Tomb of Iltutmish, Delhi (p. 55)

Plate XXXVII
Arabesque design, Sidi Sayyid Masjid, Ahmedabad (p. 56)



CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

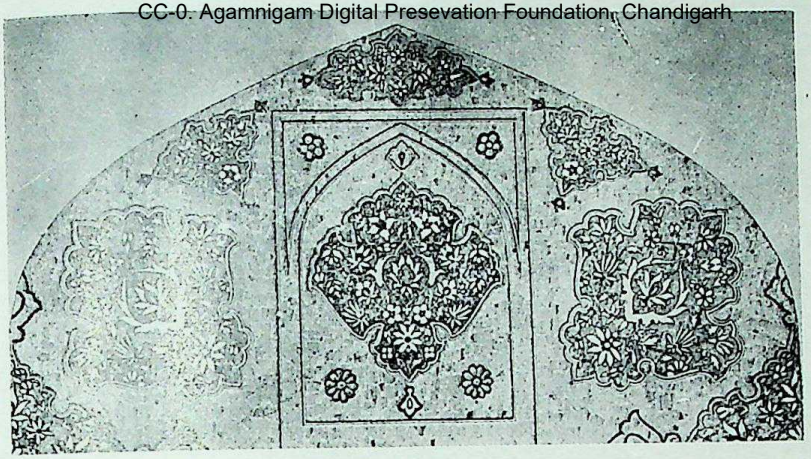
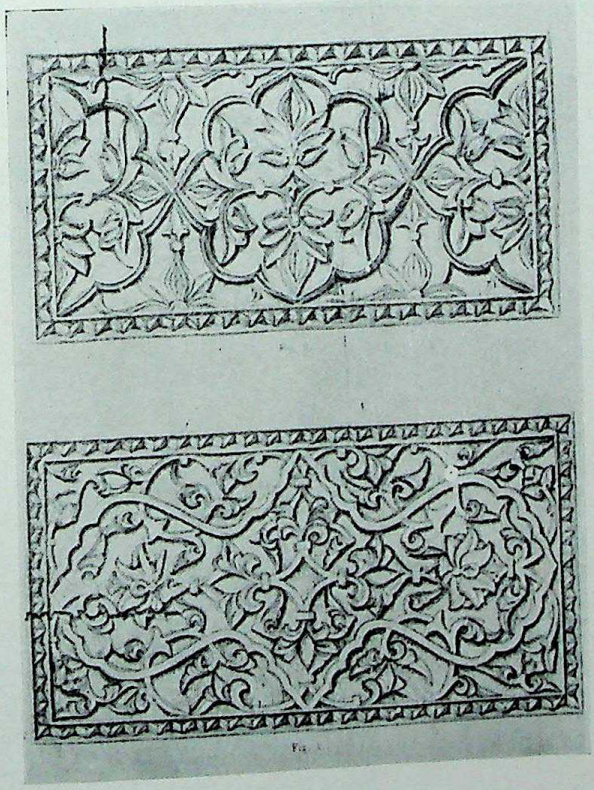


Plate XXXVIII *Arabesque design, Hakim's House, Fatehpur Sikri* (p.57)

Plate XXXIX

Arabesque design, Birbal's Palace, Fatehpur Sikri (p. 58)



CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

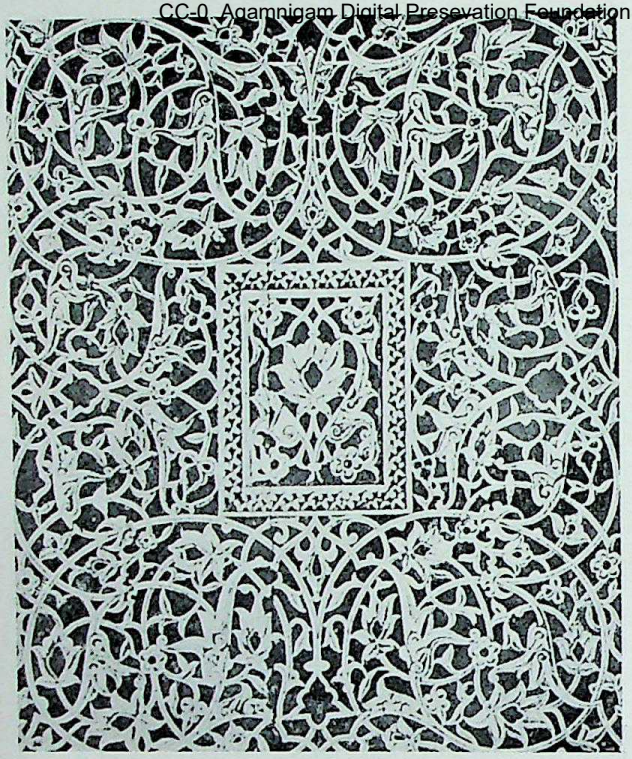


Plate XL
Arabesque design, Jodhbai's Palace, Fatehpur Sikri
(p. 58)

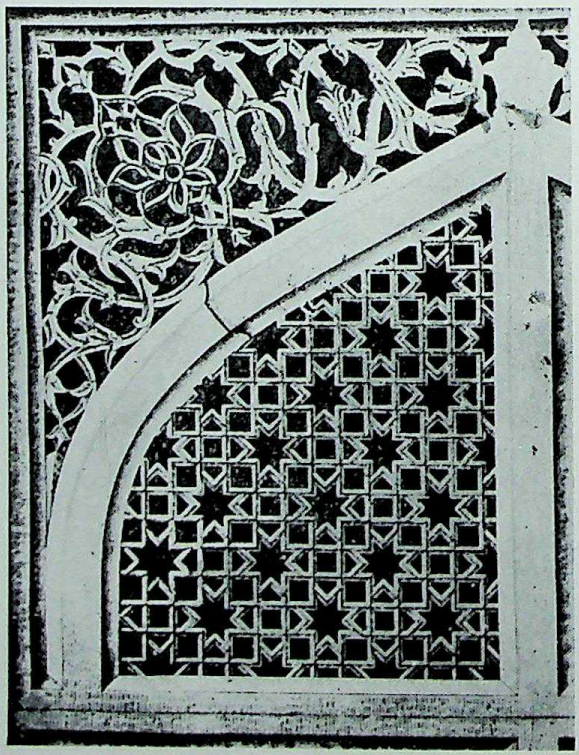


Plate XLI
Arabesque design, Salim Chishti's Tomb, Fatehpur Sikri
(p. 58)

CC-0. Agamnigam [illegible] tion, Chandigarh

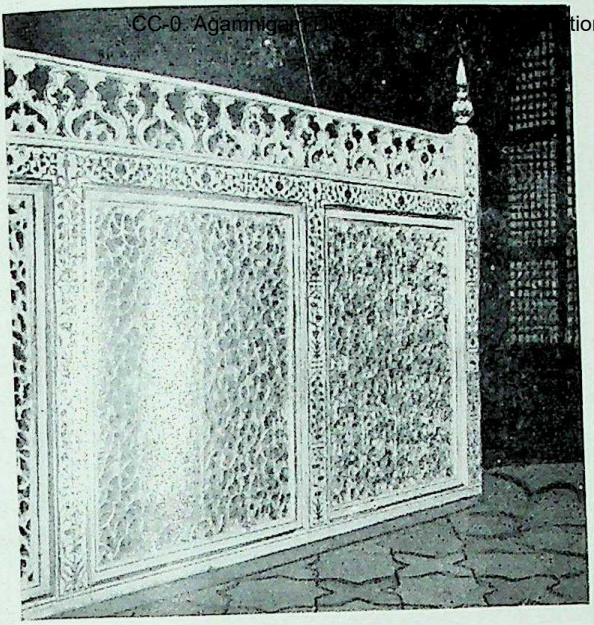
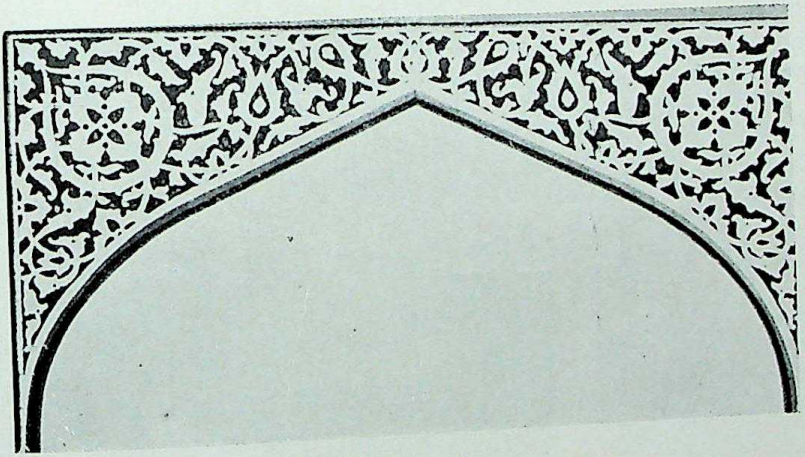


Plate XLII
Arabesque design, The Taj Mahal (p. 58)

Plate XLIII
Arabesque design, Akbar's Tomb (p. 58)



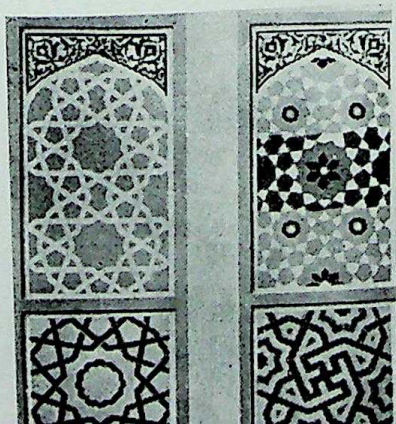


Plate XLIV
Arabesque design, Akbar's Tomb (p. 58)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

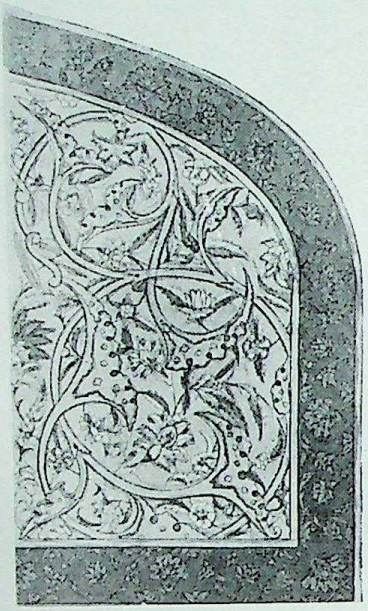


Plate XLV
Floralised Arabesque, Akbar's Tomb (p. 59)

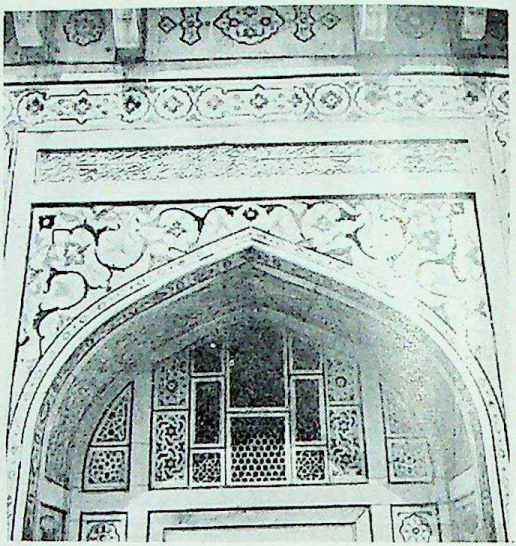


Plate XLVI
Arabesque, spandrels, Tomb of Itimad-ud-Daulah, Agra (p. 59)

Plate XLVII
Arabesque design, pavement, Tomb of Itimad-ud-Daulah
(p. 59)

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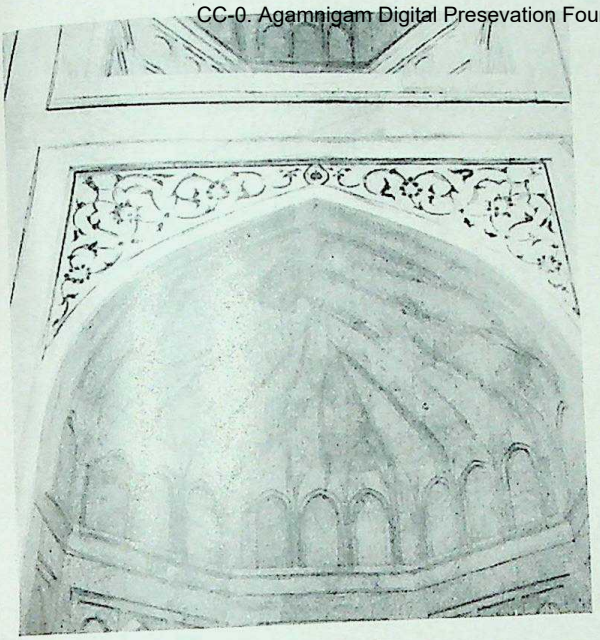

Plate XLVIII
Floralised Arabesque (inlaid), The Taj Mahal (p. 60)

Plate XLIX
Floralised Arabesque (incised painting), The Taj Mahal (p. 6)

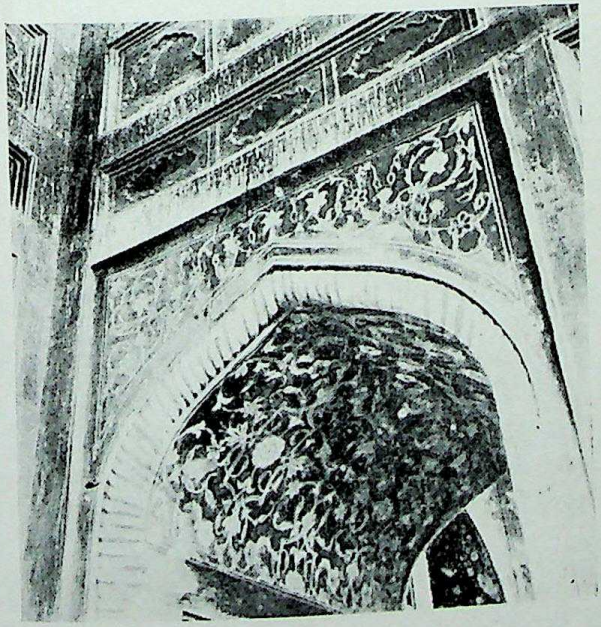

Plate L
Arabesque (glazed-tiled), Chini-ka-Rauza, Agra (p. 60)

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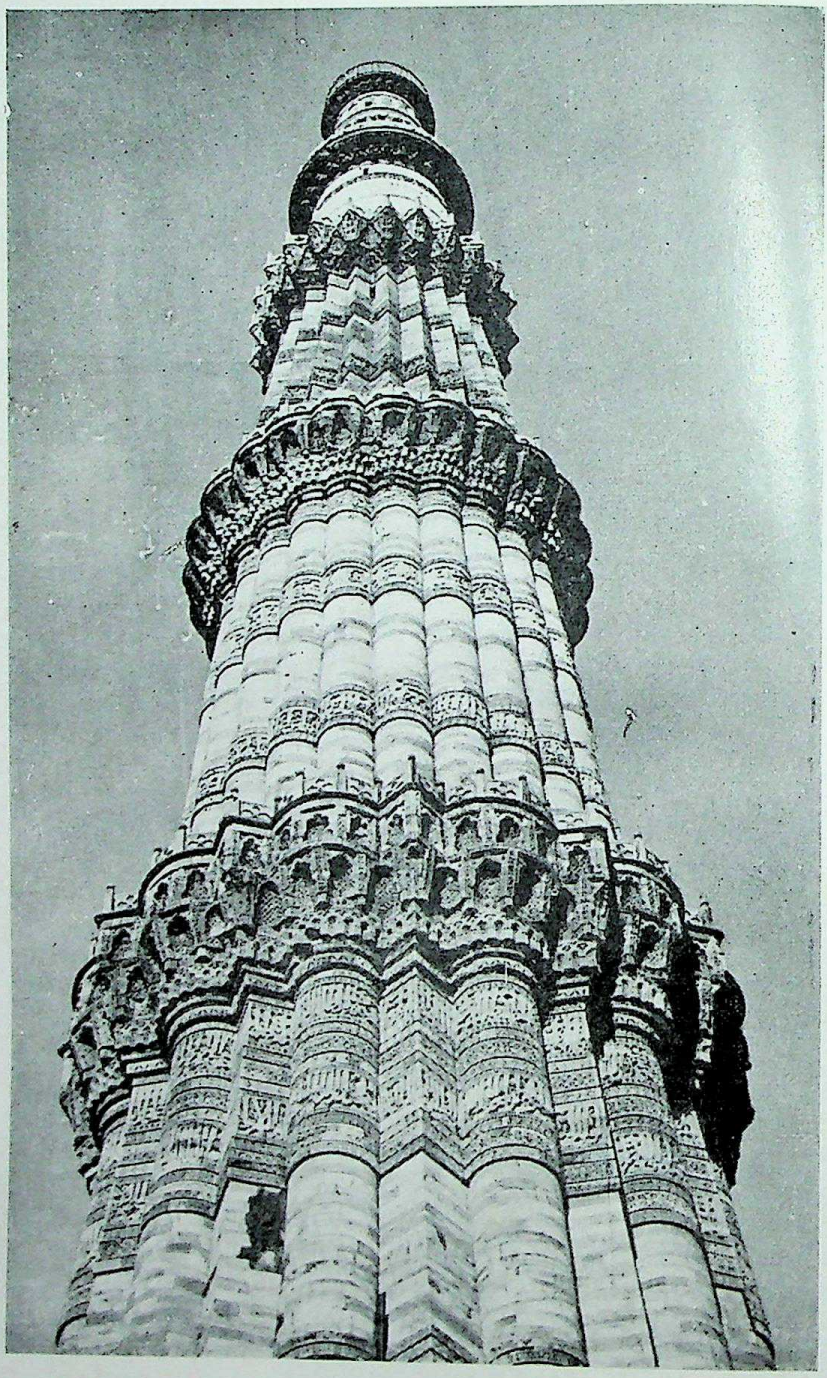

Plate LI *Stalactite, Qutab Minar* (p. 66)

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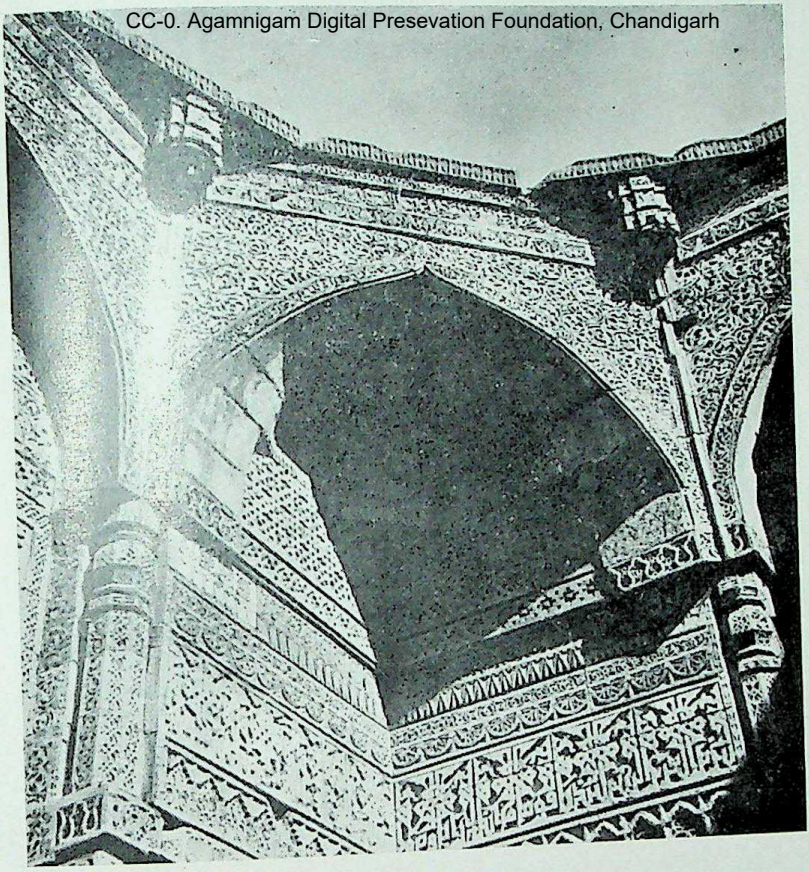

Plate LII
Squinch, Tomb of Iltutmish, Delhi
(p. 67)

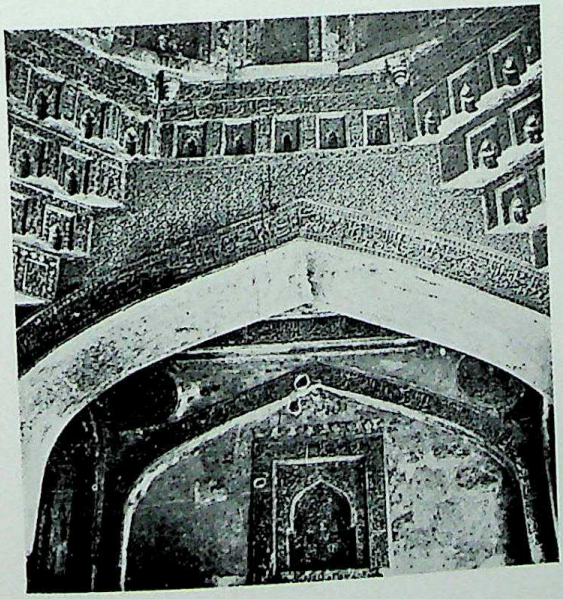

Plate LIII
Stalactite, Bara Gumbad Masjid, Delhi
(p. 69)

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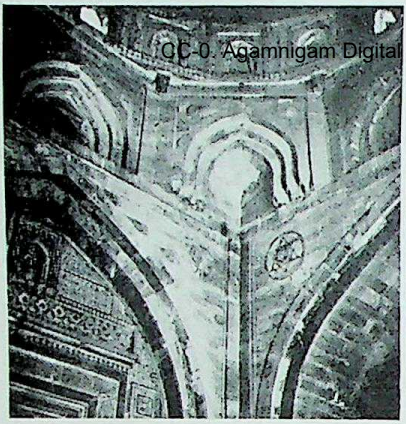

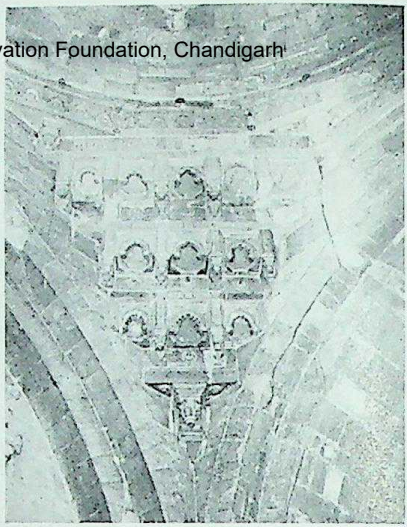

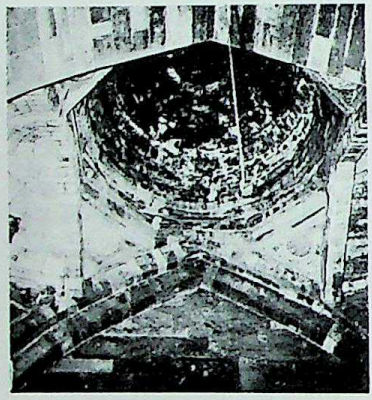

Plate LIV

(a) *Squinch, Qila-i-Kuhna Masjid, Old Fort, Delhi*

(b) *Stalactite, Qila-i-Kuhna Masjid, Old Fort, Delhi*

(c) *Cross-rib and Semi-vault, Qila-i-Kuhna Masjid*

(p. 69)

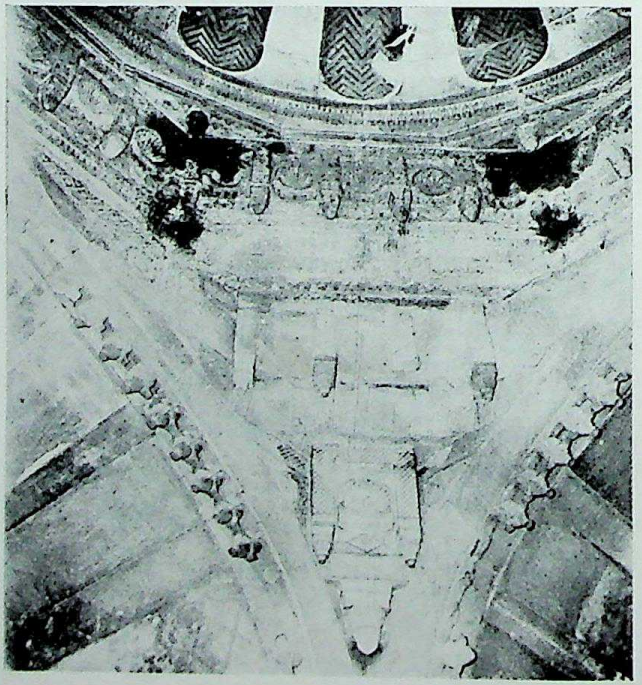

Plate LV

Stalactite with pendentives, Jehangiri Mahal, Agra Fort

(p. 70)

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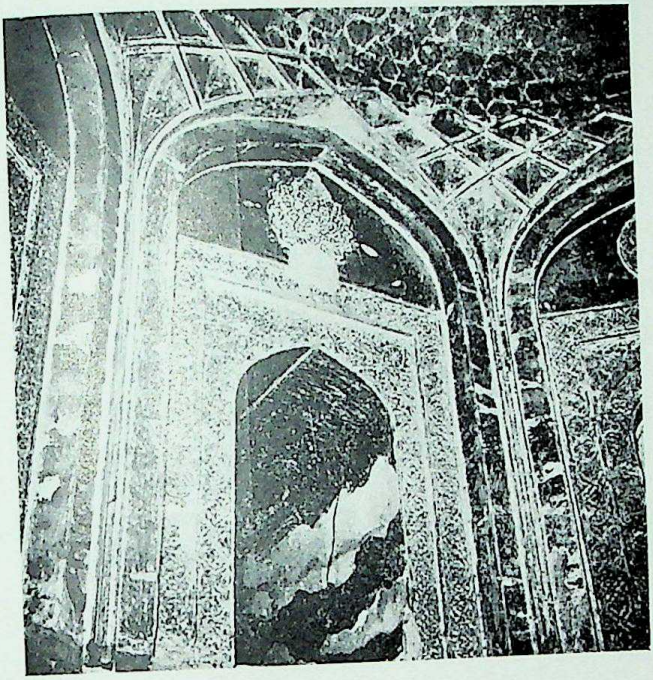

Plate LVI
Stalactite design, in stucco, Delhi Gate, Agra Fort
(p. 70)

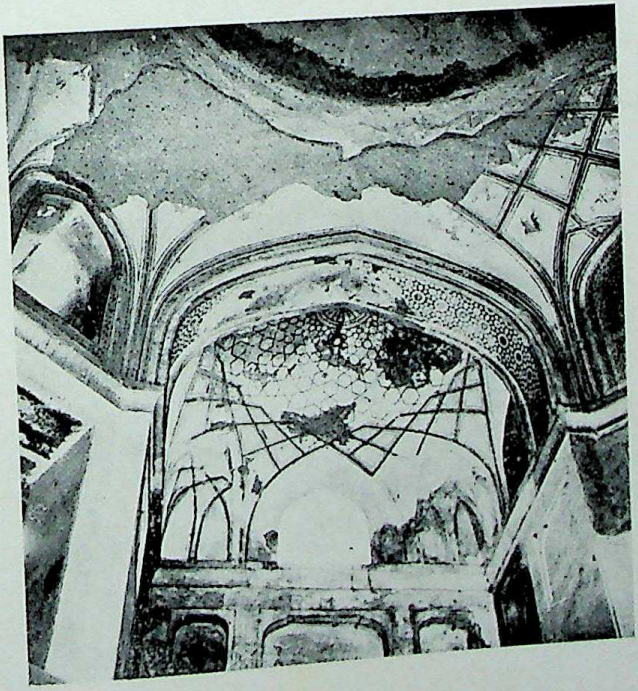

Plate LVII
Stalactite design in stucco, Large Baths, Fatehpur Sikri
(p. 70)

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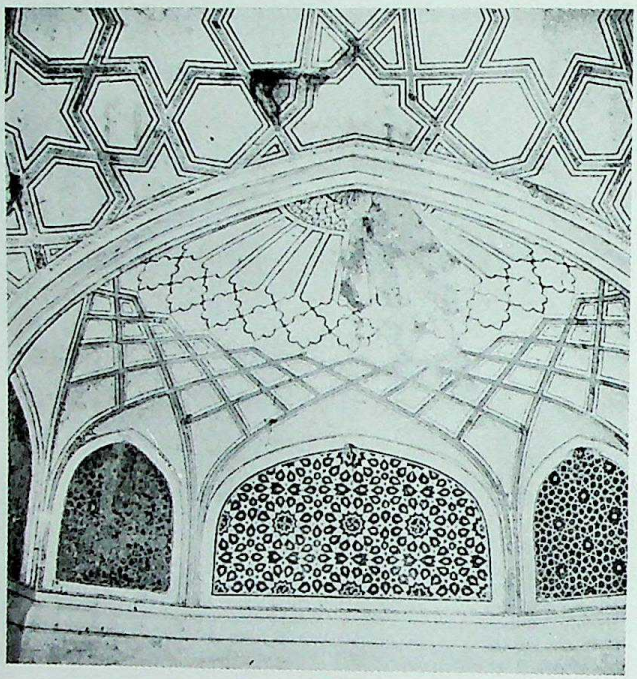

Plate LVIII
Stalactite design in stucco, Large Baths, Fatehpur Sikri
(p. 70)

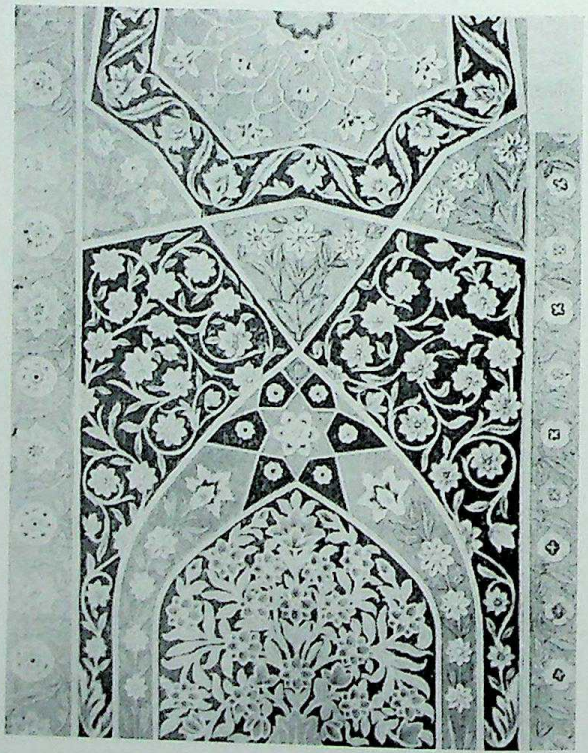

Plate LIX
Stalactite design, Salim Chishti's Tomb, Fatehpur Sikri
(p. 70)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

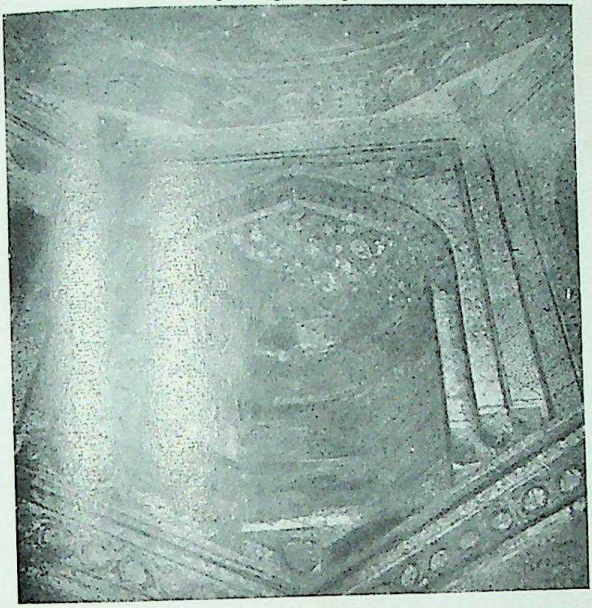

Plate LX
Squinch, Nave,
Jami Masjid,
Fatehpur Sikri
(p. 70)

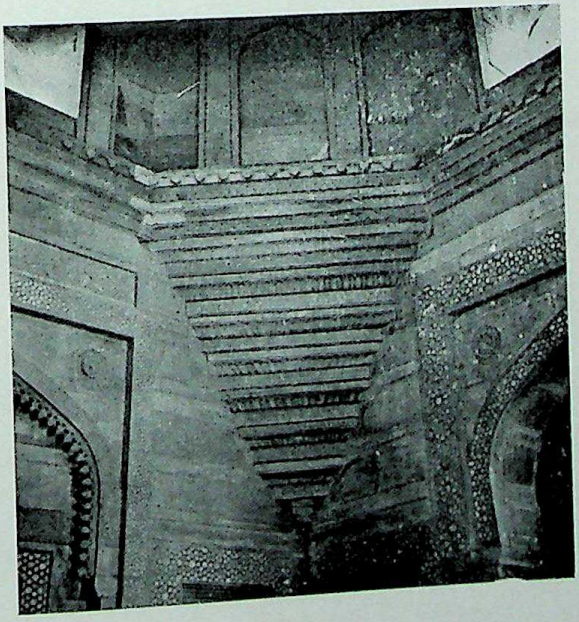

Plate LXI
Corbelled Pendentives,
Jami Masjid,
Fatehpur Sikri
(p. 71)

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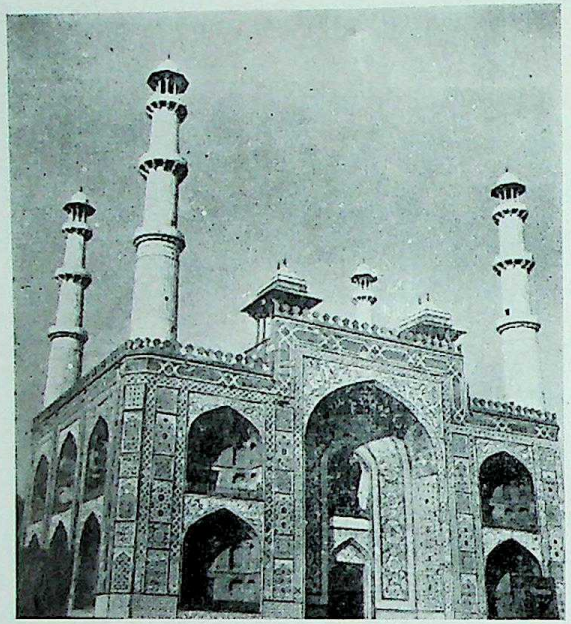


Plate LXII
Stalactite design, Main Gateway, Akbar's Tomb
(p. 71)

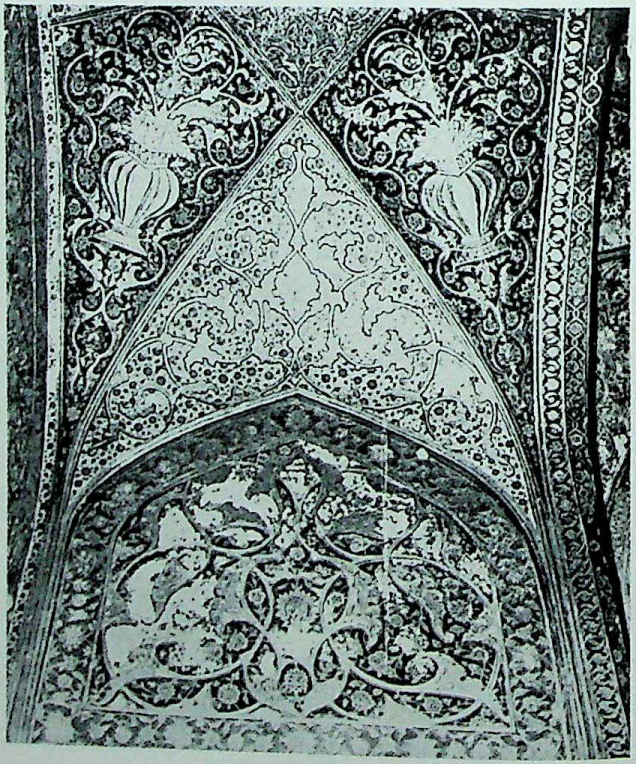


Plate LXIII
(a) *Stalactite design, vestibule, Akbar's Tomb*
(p. 72)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

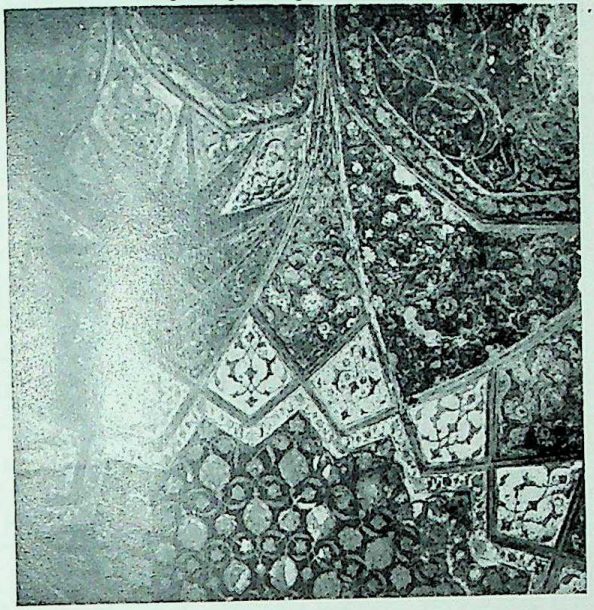
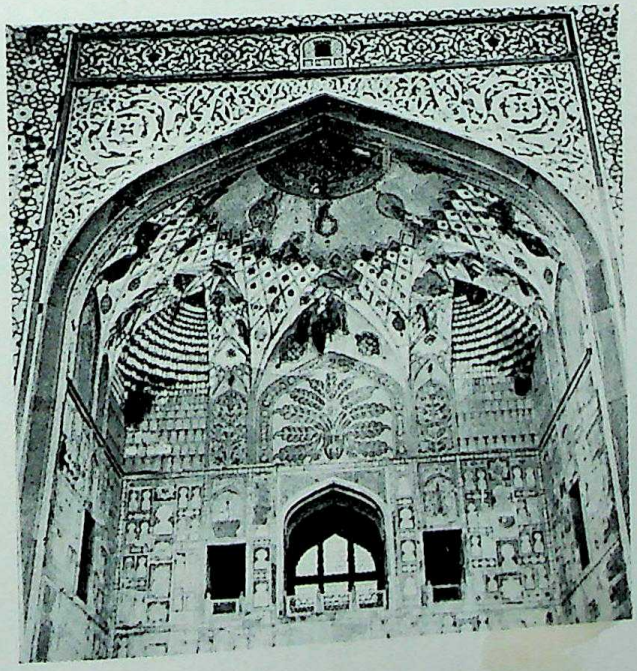


Plate LXIII (b) *Stalactite design, vestibule, Akbar's Tomb* (p. 72)

(c) *Stalactite design, iwan, Western Gateway, Akbar's Tomb* (p. 72)



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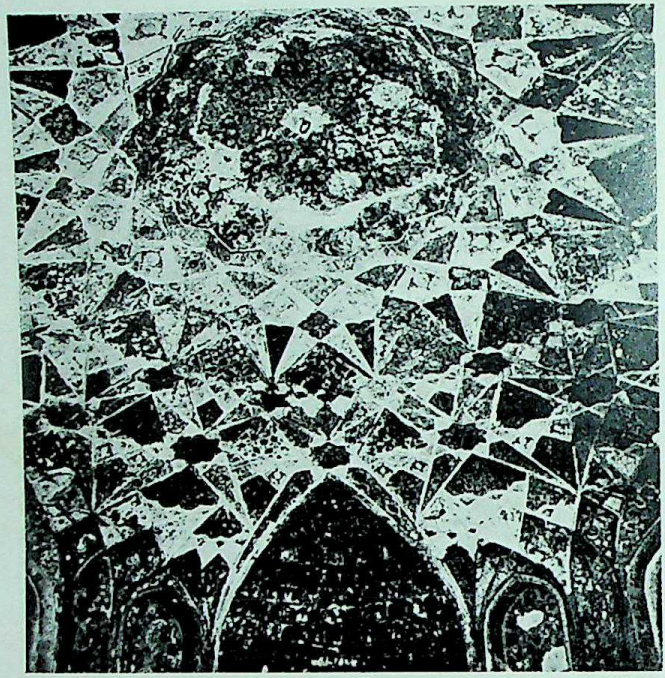


Plate LXIV *Stalactite design, Tomb of Itimad-ud-Daulah, Agra* (p. 72)

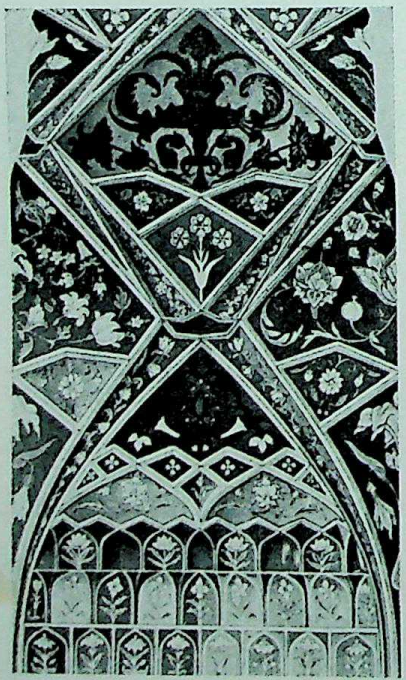
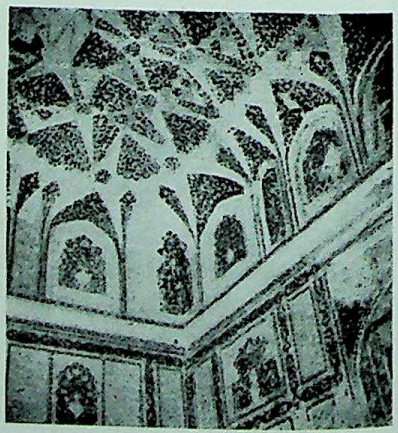


Plate LXV
Stalactite design,
Chini-ka-Rauza, Agra (p. 72)

Plate LXVI
Stalactite in glass-mosaic,
Shish-Mahal, Agra Fort (p. 73)



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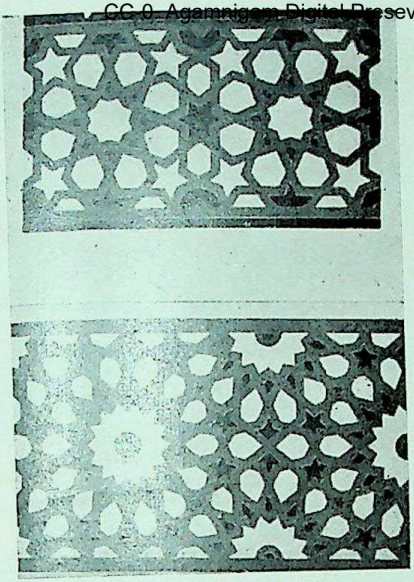


Plate LXVII
Geometrical (inlaid), Jami Masjid, Fatehpur Sikri
(p. 76)

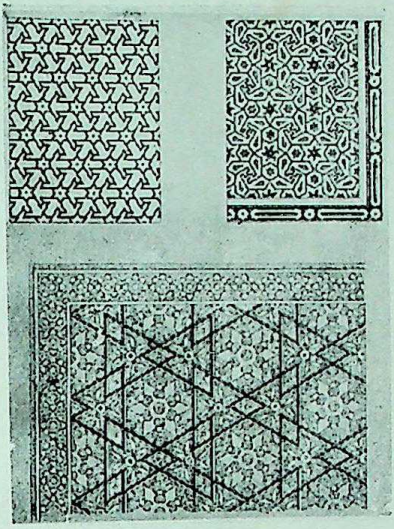


Plate LXVIII
Geometrical (stucco), Large Baths, Fatehpur Sikri
(p. 76)

Plate LXIX
Geometrical (stucco), Large Baths, Fatehpur Sikri (p. 76)

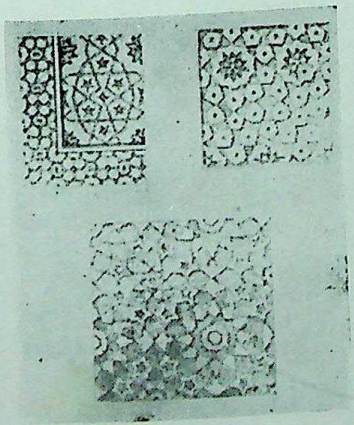
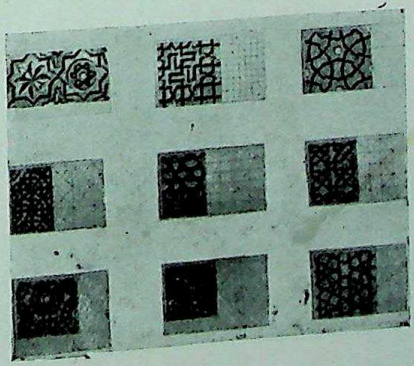


Plate LXX
Geometricals, Birbal's Palace, Fatehpur Sikri (p. 76)



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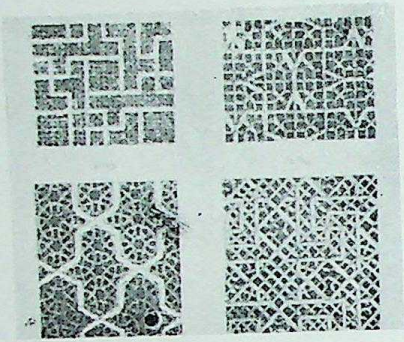

Plate LXXI
Geometricals in Jalies, Tomb of Salim Chishti, Fatehpur Sikri
(p. 76)

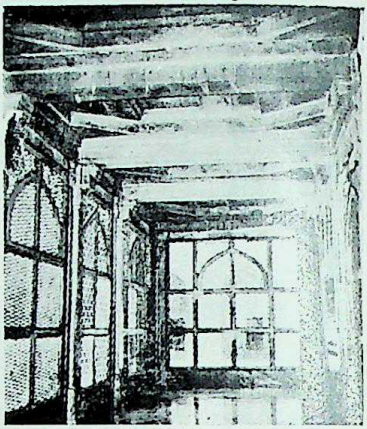

Plate LXXII
Geometricals in Jalies, Tomb of Salim Chishti, Fatehpur Sikri
(p. 77)

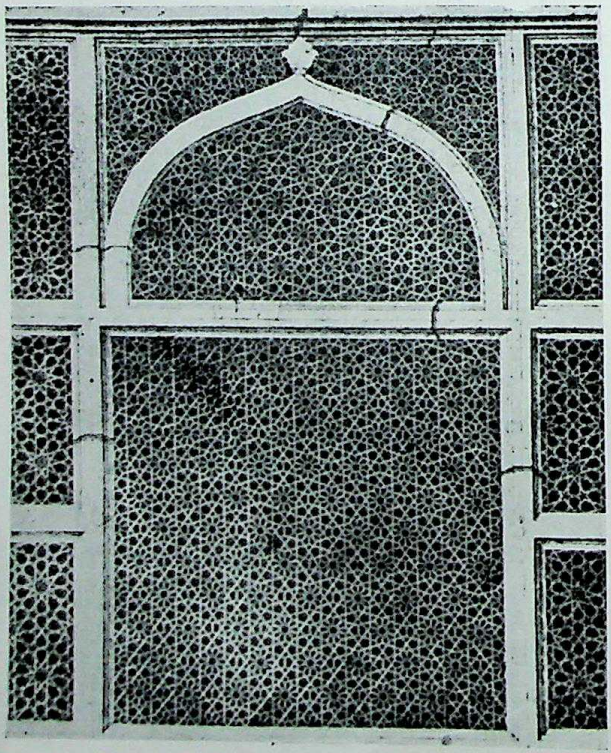

Plate
LXXIII
Geometricals in Jalies, Tomb of Salim Chishti
(p. 77)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

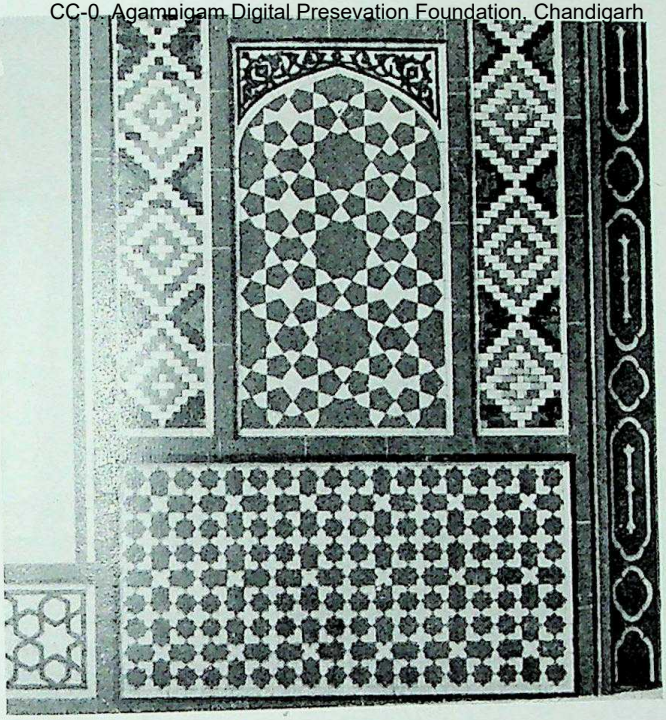

Plate LXXIV *Geometricals in Mosaic, Akbar's Tomb* (p. 77)

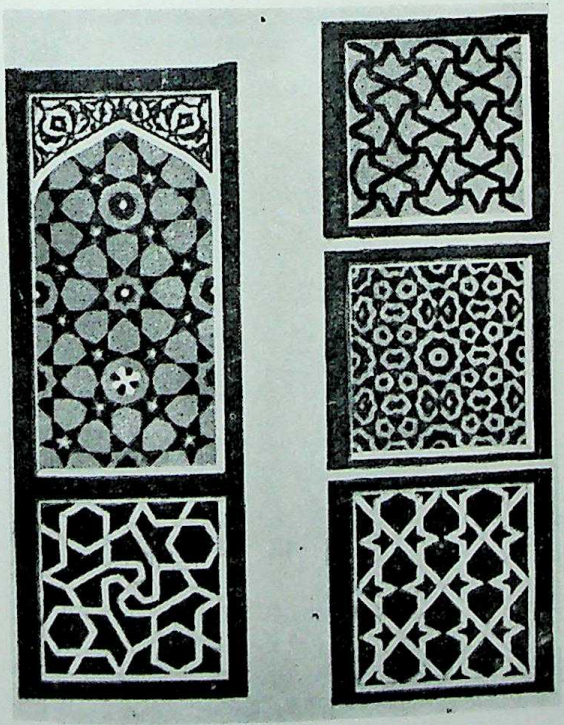

Plate LXXV
Geometricals in Mosaic, Akbar's Tomb
(p. 77)

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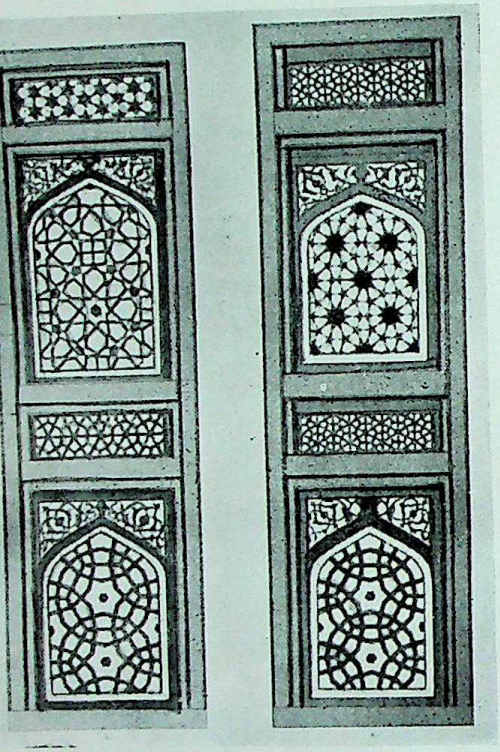


Plate LXXVI *Geometricals in Mosaic, Akbar's Tomb* (p. 77)

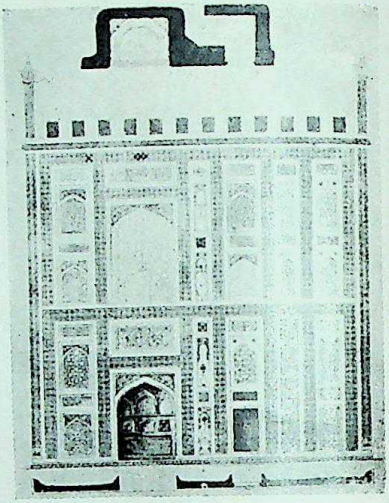


Plate LXXVII
Geometricals in Mosaic, Akbar's Tomb (p. 77)

Plate LXXVIII
Geometricals in Mosaic, Akbar's Tomb (p. 78)

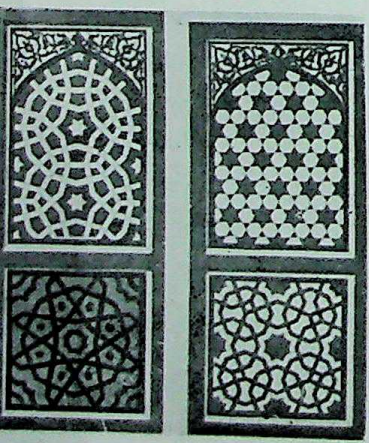
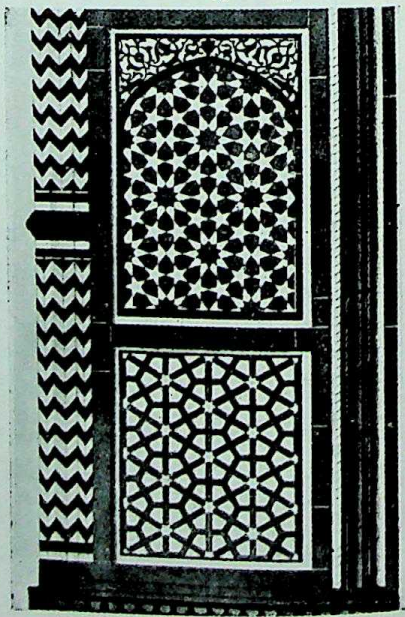


Plate LXXIX
Geometricals in Mosaic, Akbar's Tomb (p. 78)



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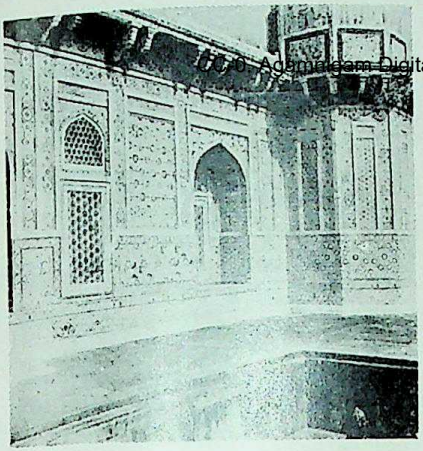


Plate LXXX
Geometricals in Mosaic,
Tomb of Itimad-ud-Daulah, Agra
(p. 78)

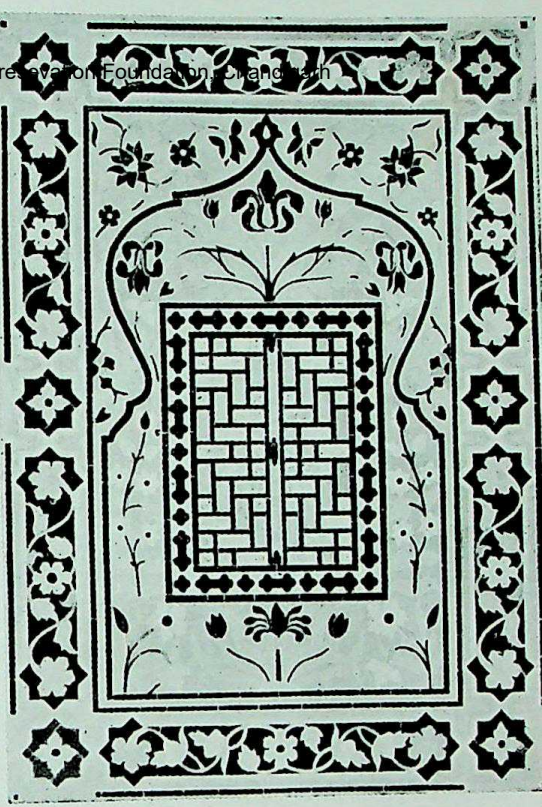


Plate LXXXI
Geometrical design (glazed-tiled)
Chini ka-Rauza (p. 78)

Plate LXXXII
Stylized design, Sultana's Palace,
Fatehpur Sikri (p. 87)

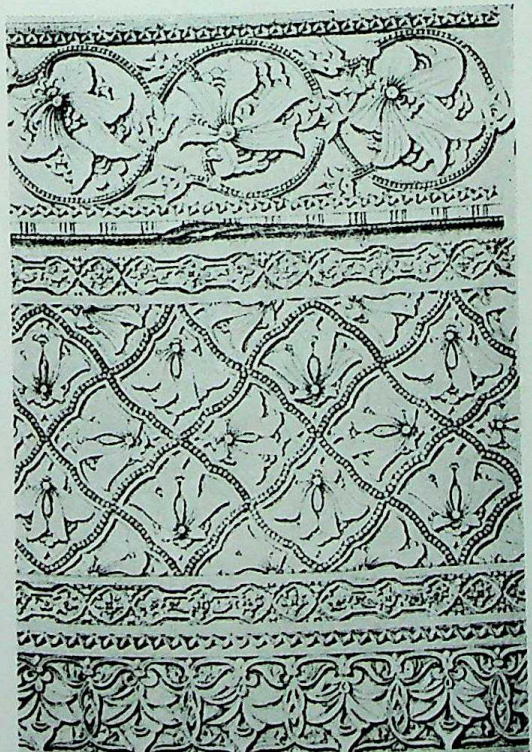


Plate LXXXIII
Stylized Design, Jami Masjid,
Fatehpur Sikri (p. 87)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

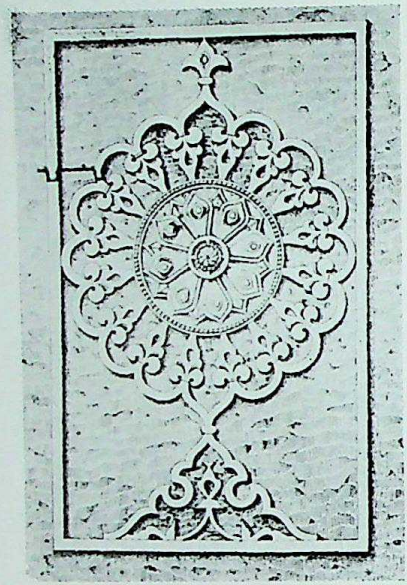


Plate LXXXIV
Stylized design, Salim Chishti's Tomb, Fatehpur Sikri (p. 87)

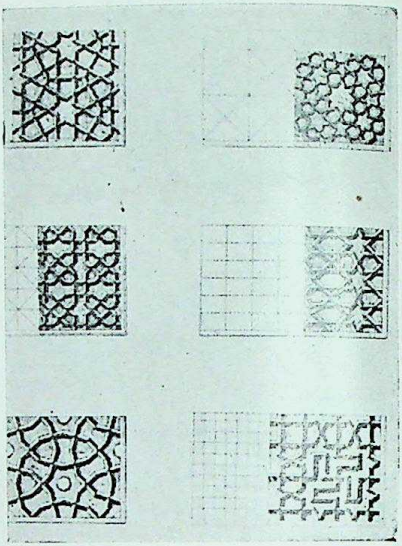


Plate LXXXV
Stylized design, Birbal's Palace. Fatehpur Sikri (p. 87)

Plate LXXXVII
Stylized design, Tomb of Itimad-ud-Daulah
(p. 88)

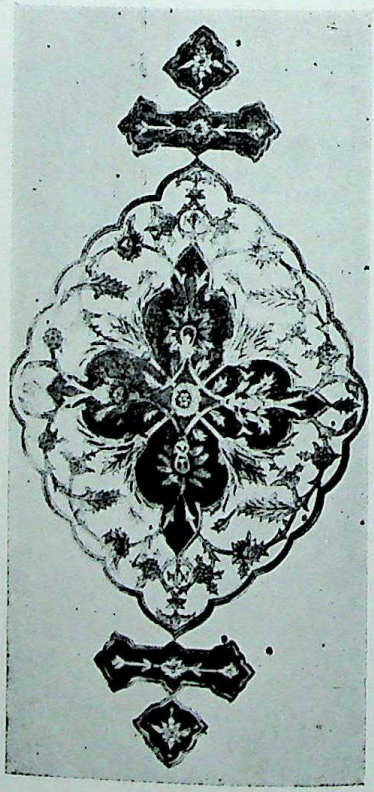
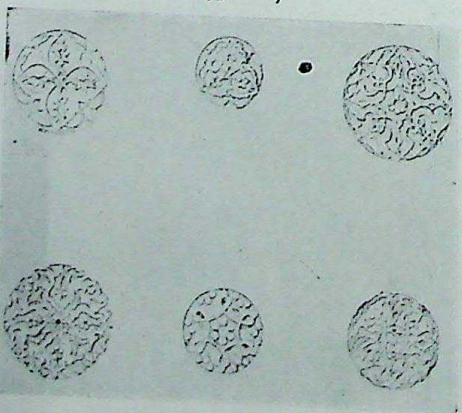


Plate LXXXVI
Stylized design, Hakim's House, Fatehpur Sikri (p. 87)



CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

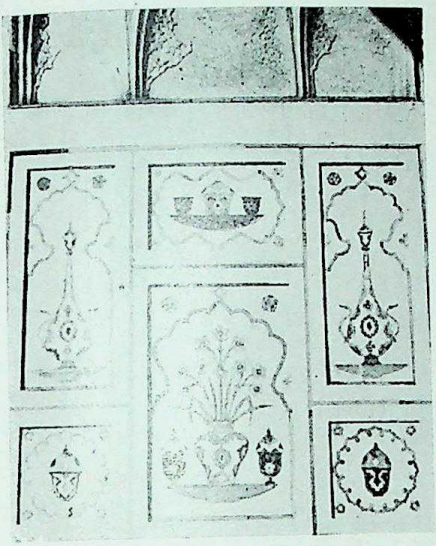


Plate LXXXVIII
Floral and Stylized designs, Tomb of Itimad-ud-Daulah (p. 88)

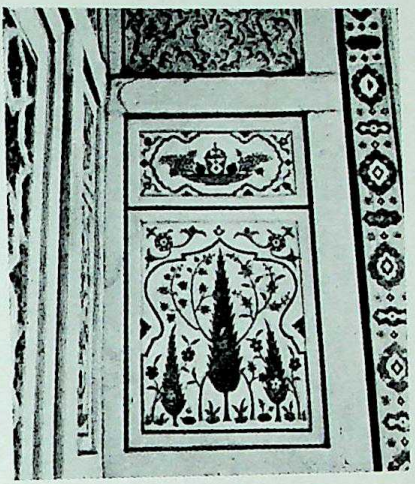
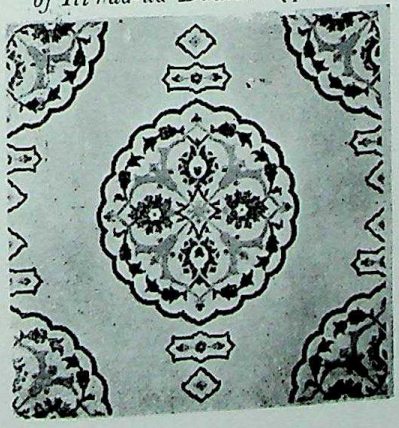


Plate LXXXIX
Floral and Stylized design, Tomb of Itimad-ud-Daulah (p. 88)

Plate XC
Stylized design, Tomb of Itimad-ud-Daulah (p. 81)



CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

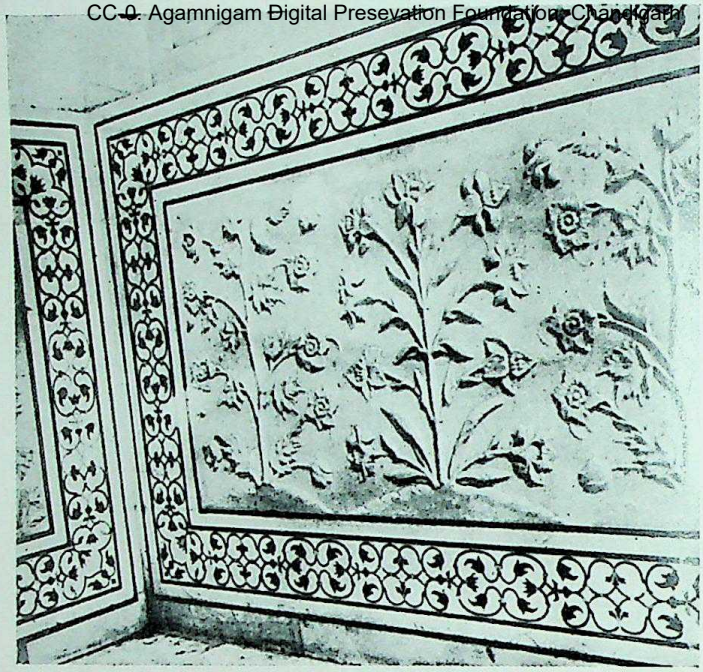
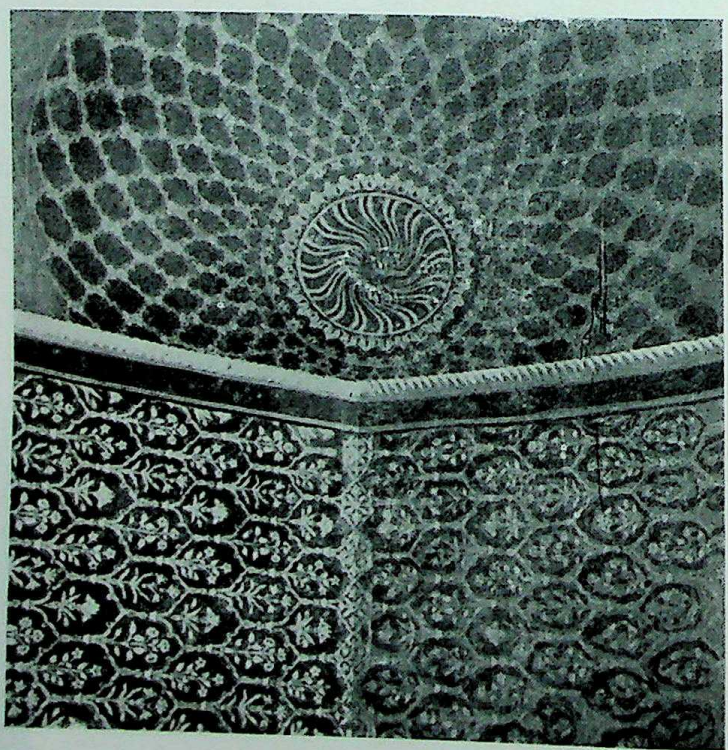


Plate XCI *Stylized design, dado, The Taj Mahal* (p. 88)

Plate XCII *Stylized design, Mehmankhana, The Taj* (p. 88)



CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

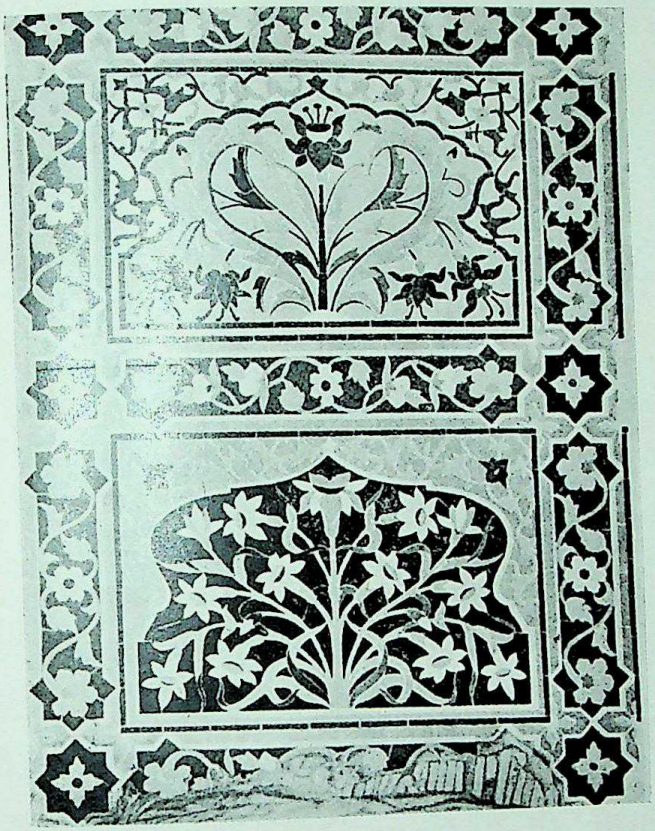
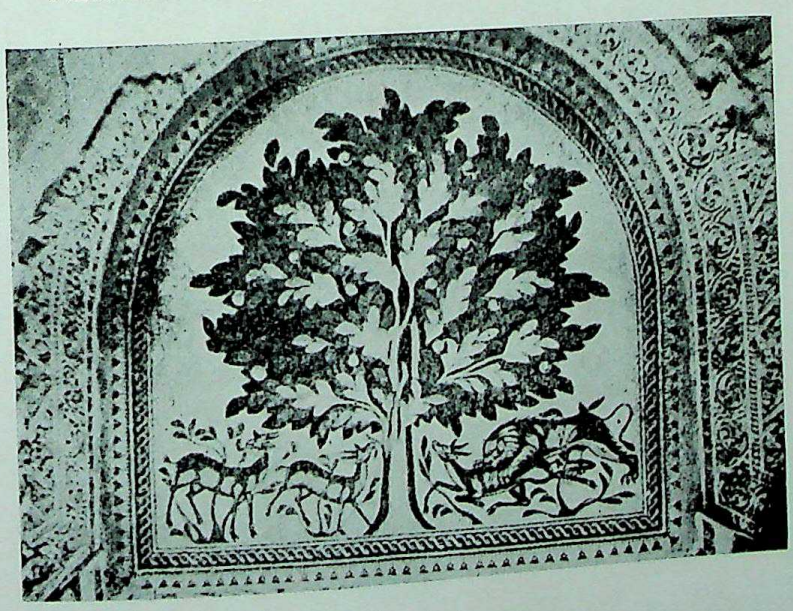


Plate XCIII
Stylized design, Chini-ka-Rauza, Agra
(p. 88)

Plate XCIV *Figural Art, Khirbat al-Maſjah* (743) (p. 98)



CC-0. Asamiganj Digital Preservation Foundation, Chandigarh

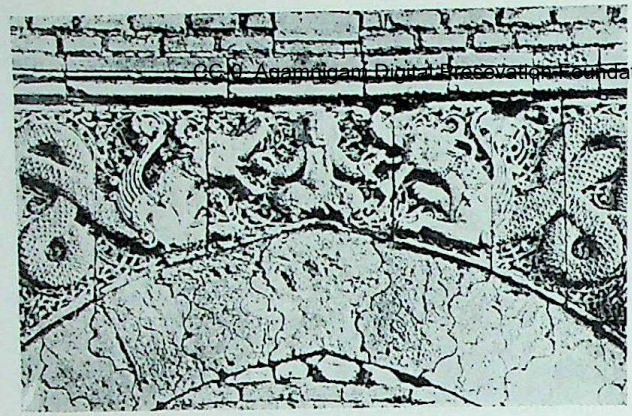


Plate XCV
Animation,
Talisman Gate,
Baghdad (1221)
(p. 99)

Plate XCVI
Painting from
Miraj-Nama
(p. 101)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

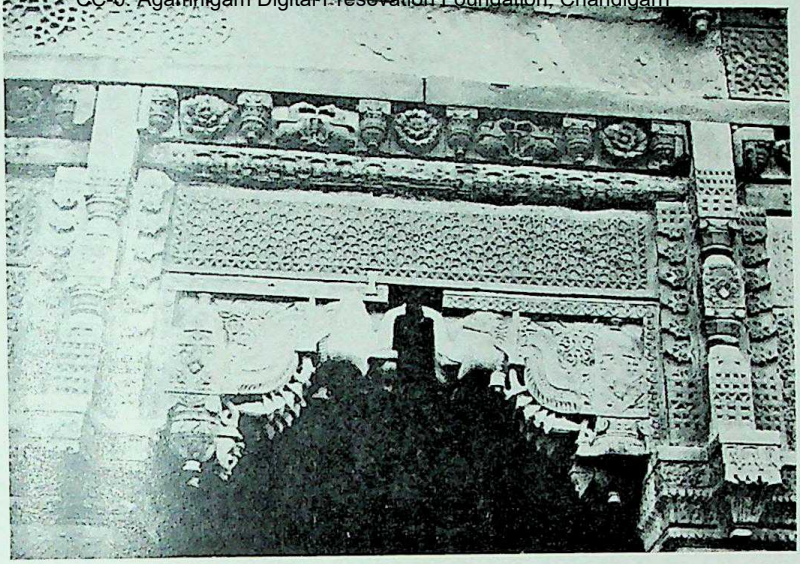
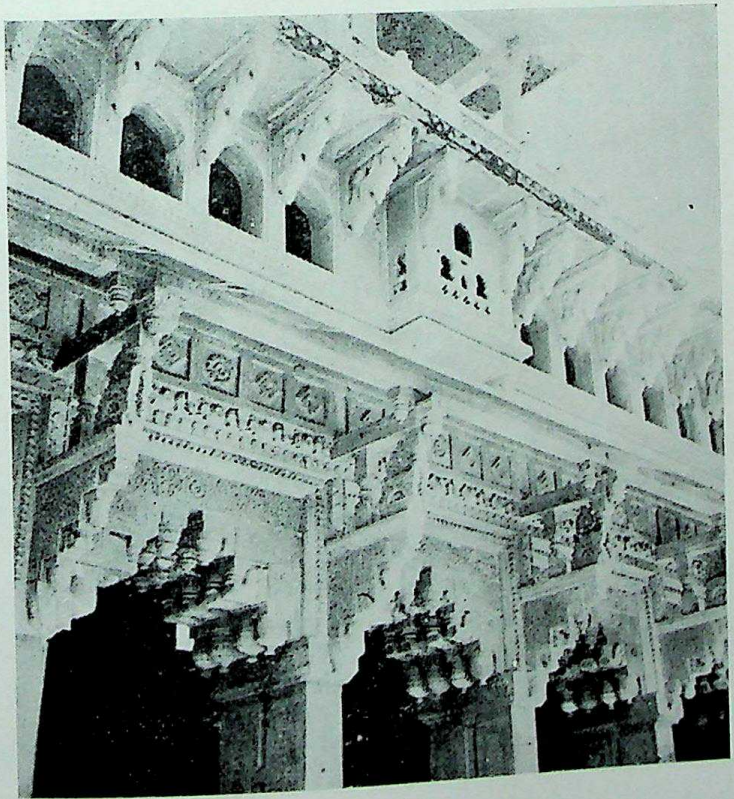


Plate XCVII *Elephant-brackets, Delhi Gate, Agra Fort* (p. 109)

Plate XCVIII *Animation on lintels, Jehangiri Mahal, Agra Fort* (p. 109)



CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

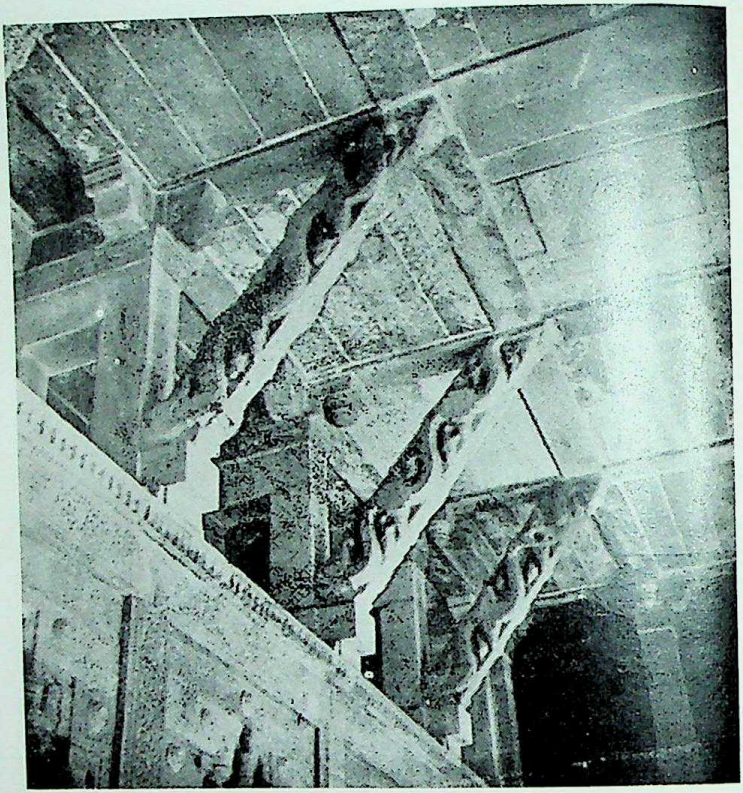


Plate XCIX *Makara-brackets, Jehangiri Mahal, Agra Fort*
(p. 109)

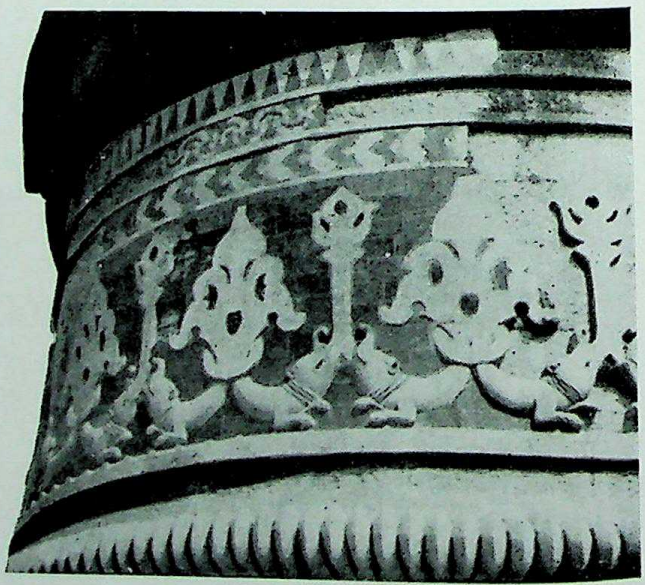


Plate C
Makara,
Man-Mandir,
Gwalior
(p. 112)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

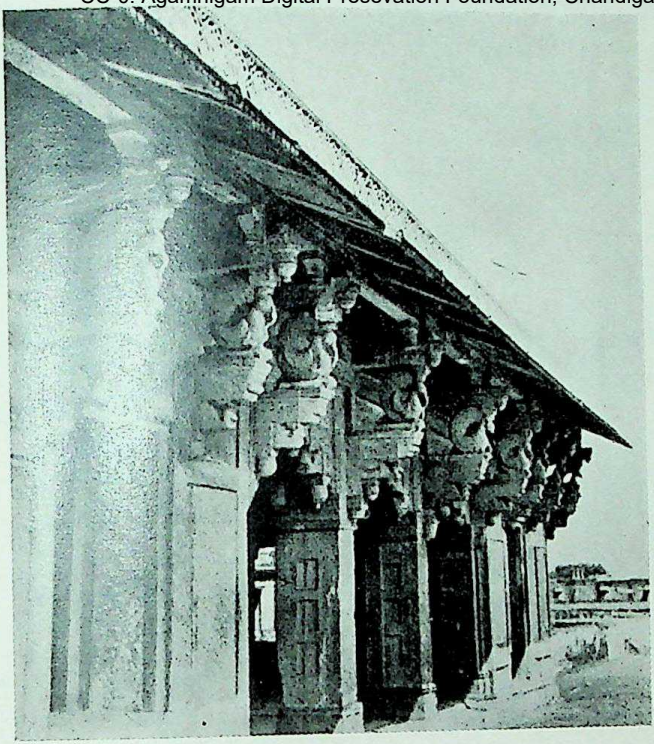


Plate CI
Mayūra-brackets, Mayūra-Maṇḍapa, Jehangiri Mahal, Agra Fort
(p. 113)

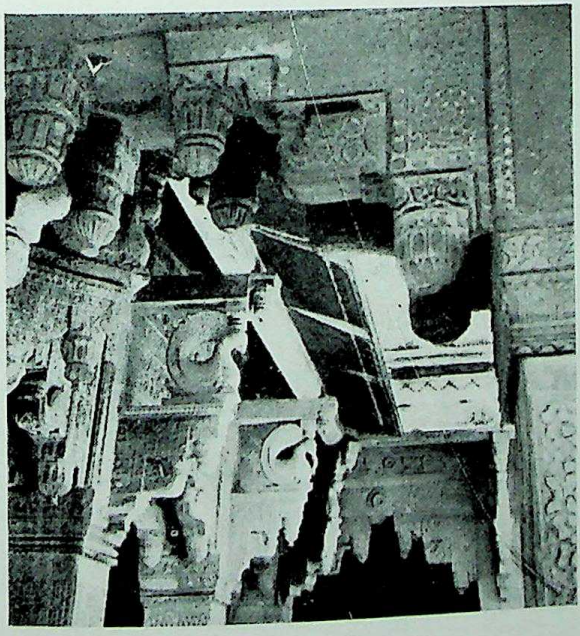


Plate CII
Mayūra-brackets, Mayūra-Maṇḍapa Jehangiri Mahal
(p. 113)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Plate CIII *Kārttikeya* (p. 115)

Plate CIV
Painting, Khwabgah, Fatehpur Sikri (p. 117)

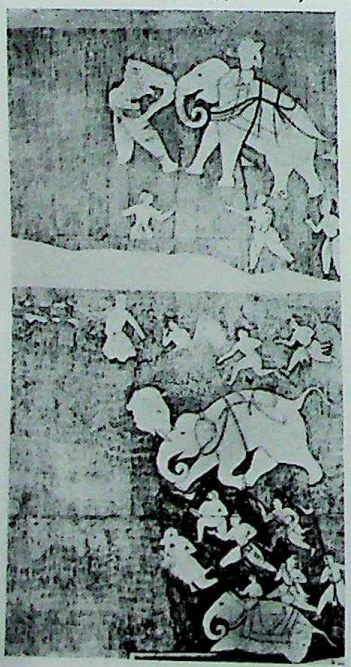


Plate CV
Painting, Rangin Mahal (Mariam's House), Fatehpur Sikri (p. 117)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

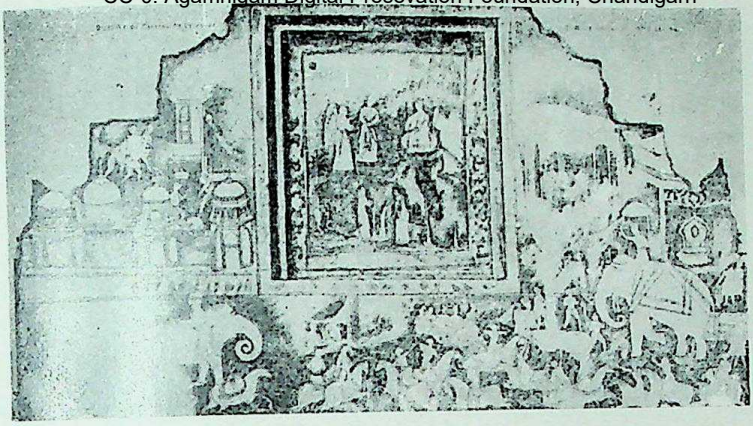
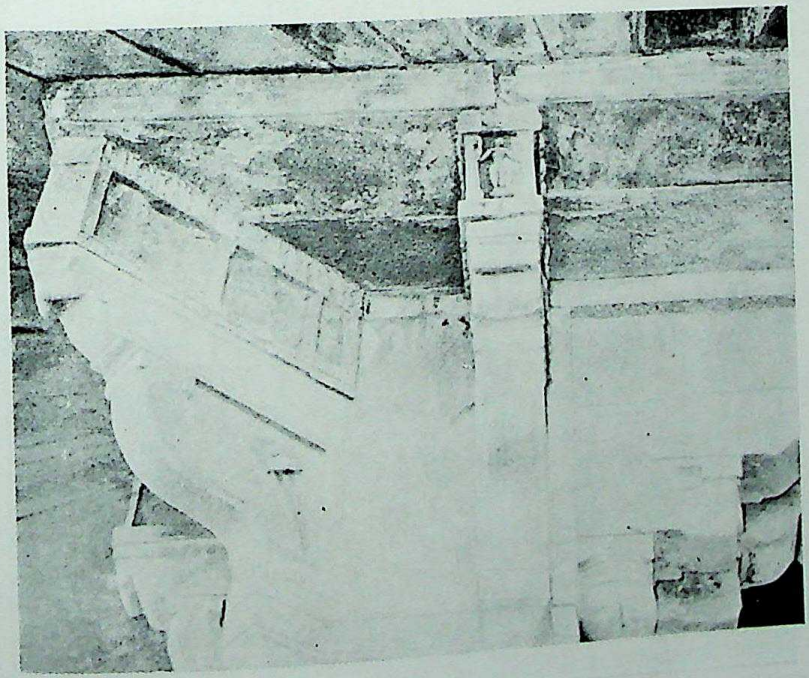


Plate CVI *Painting, Rangin Mahal* (p. 117)

Plate CVII *Rāma, Rangin Mahal* (p.118)



CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

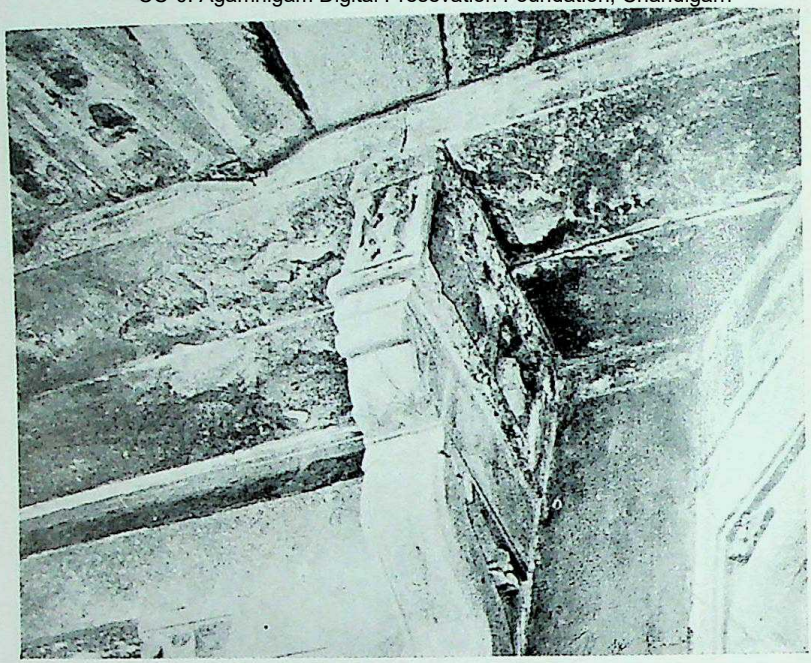


Plate CVIII *Hanumān, Rangin Mahal* (p. 118)

Plate CIX *Forest scene, on the dado, Sultana's House, Fatehpur Sikri* (p. 118)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

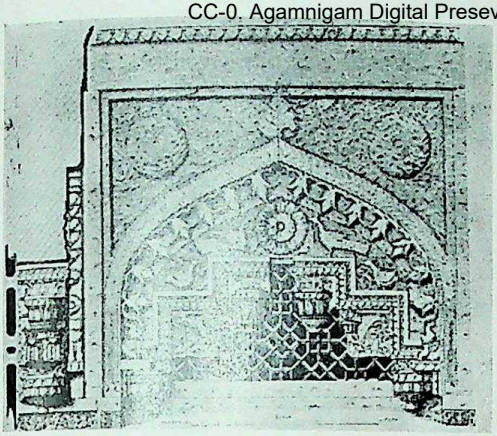


Plate CX *Peacocks and Hamsas, Birbal's Palace, Fatehpur Sikri* (p. 118)

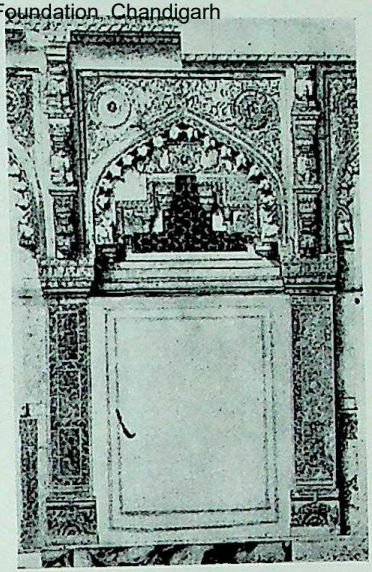


Plate CXI
Peacocks and Hamsas, Birbal's Palace→
(p. 118)

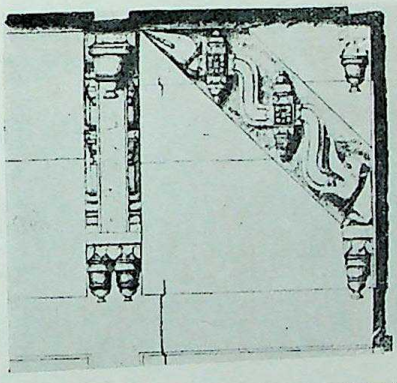
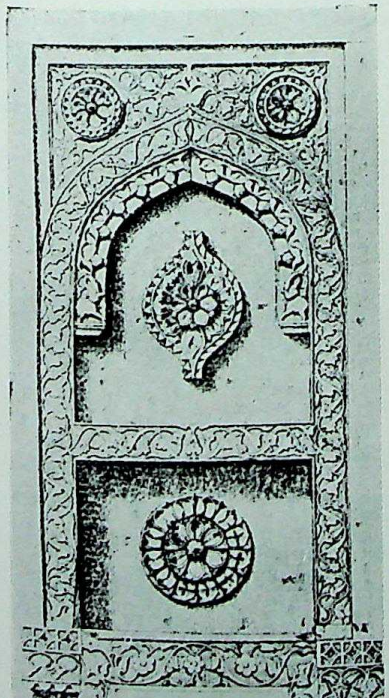


Plate CXIII *Makara, Ankh-Michoni,*→
Fatehpur Sikri (p. 119)

Plate CXII *Elephants, Birbal's Palace*
(p. 118)



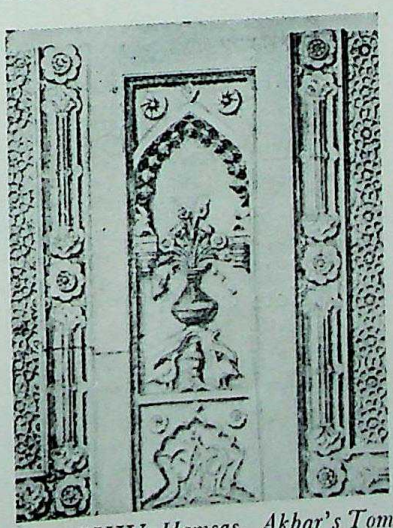


Plate CXIV *Hamsas, Akbar's Tomb*
(p. 119)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

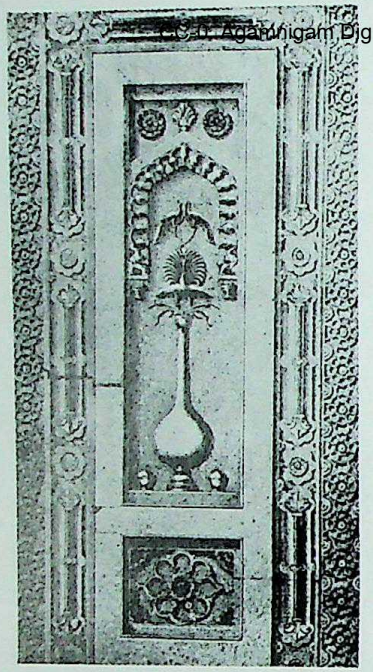


Plate CXV
Peacocks, Akbar's Tomb
(p. 120)

Plate CXVI *Butterflies, Akbar's Tomb* (p. 120)

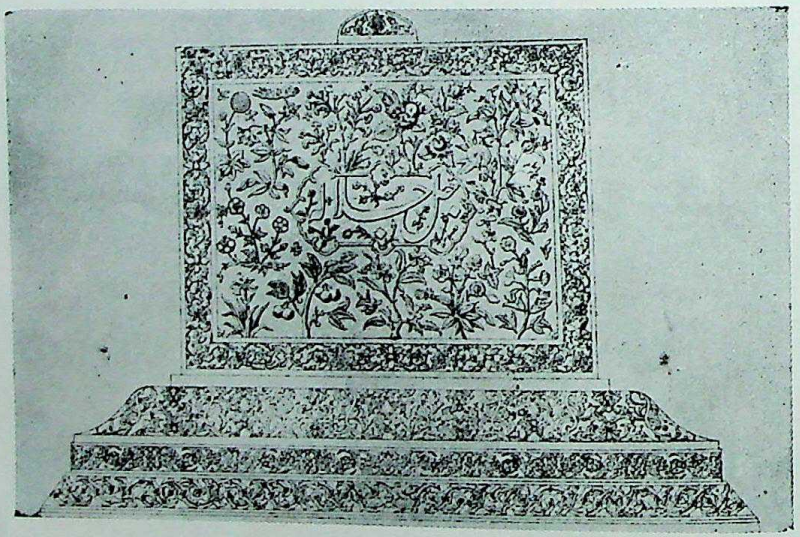
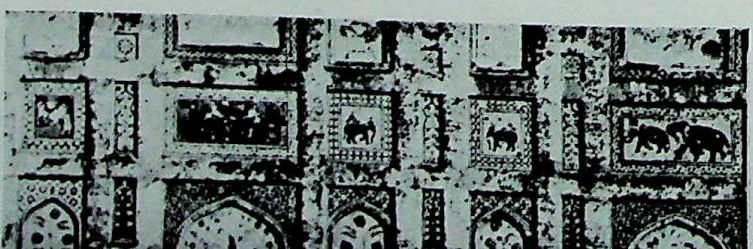


Plate CXVII *Picture-wall (glazed-tiled), Lahore Fort* (p. 122)



CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

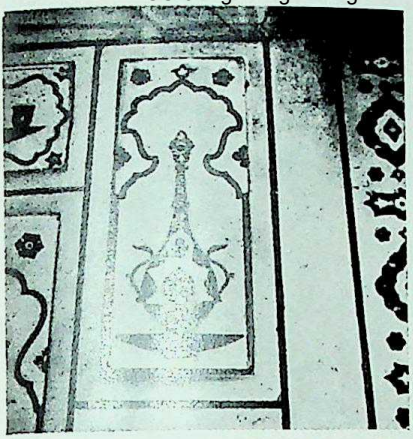


Plate CXVIII
Handles with bird's beak, Tomb of Itimad-ud-Daulah (p. 123)

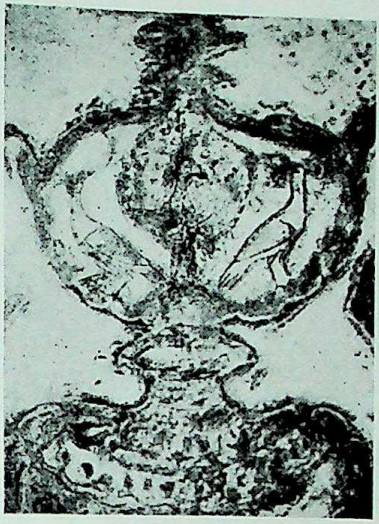
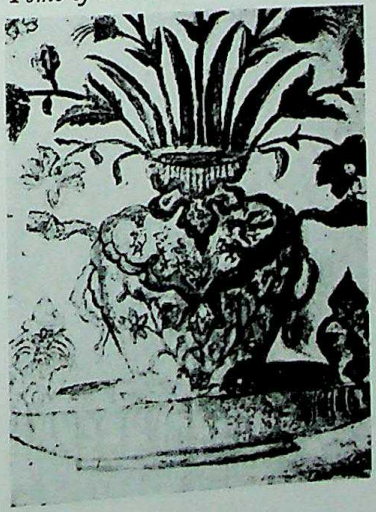


Plate CXIX
Peacocks, Tomb of Itimad-ud-Daulah
(p. 123)

Plate CXX
Fish, Tomb of Itimad-ud-Daulah
(p.123)

Plate CXXI
Rats and Dogs,
Tomb of Itimad-ud-Daulah (p.123)



CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

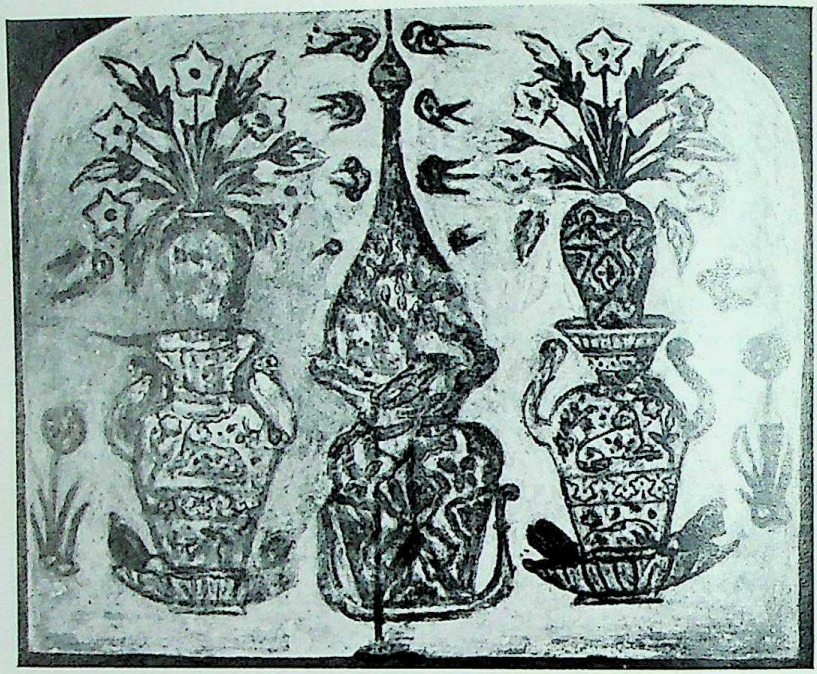


Plate CXXII *Lions, Tomb of Itimad-ud-Daulah* (p. 123)

Plate CXXIII *Human figure, Tomb of Itimad-ud-Daulah* (p. 123)

CC-0. Jangamnigam Digital Presevation Foundation, Chandigarh

Plate CXXIV
Human figure, Tomb of Itimad-ud-Daulah (p. 123)

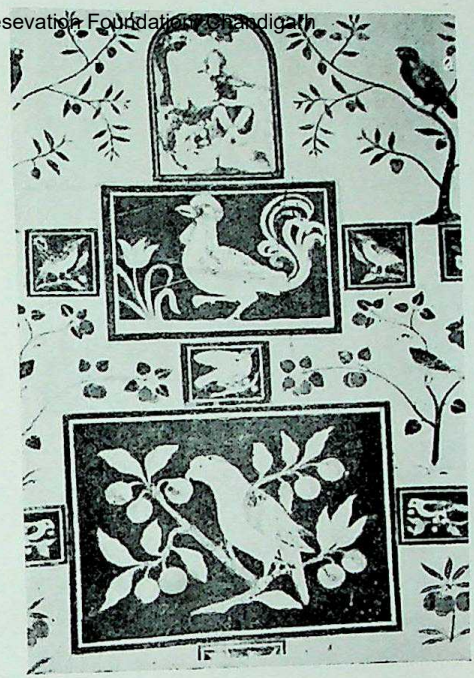
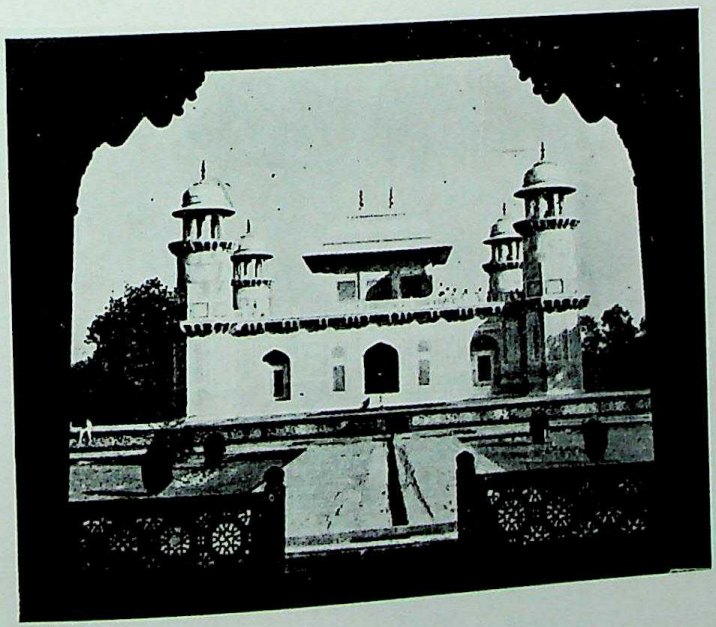


Plate CXXVI
The Dewan-i-Am, Red Fort, Delhi, plaque showing Orpheus and Birds (p.125)

Plate CXXV *The Tomb of Itimad-ud-Daulah, Agra* (p.124)



CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Plate CXXVII
The Delhi-Gate, Agra Fort
(p. 126)

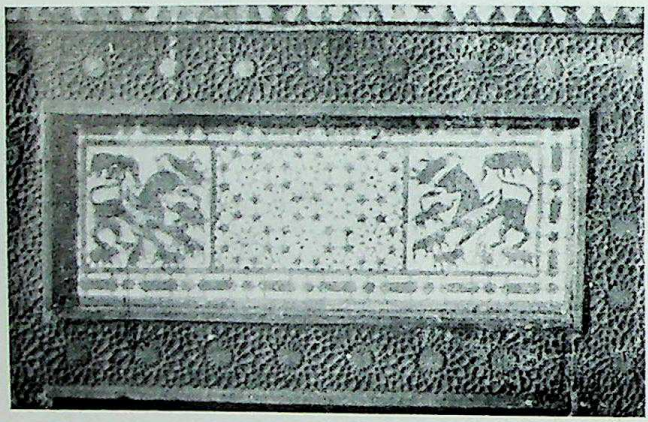


Plate CXXVIII
Gaja-vyāla,
Delhi-gate,
Agra Fort
(p. 127)

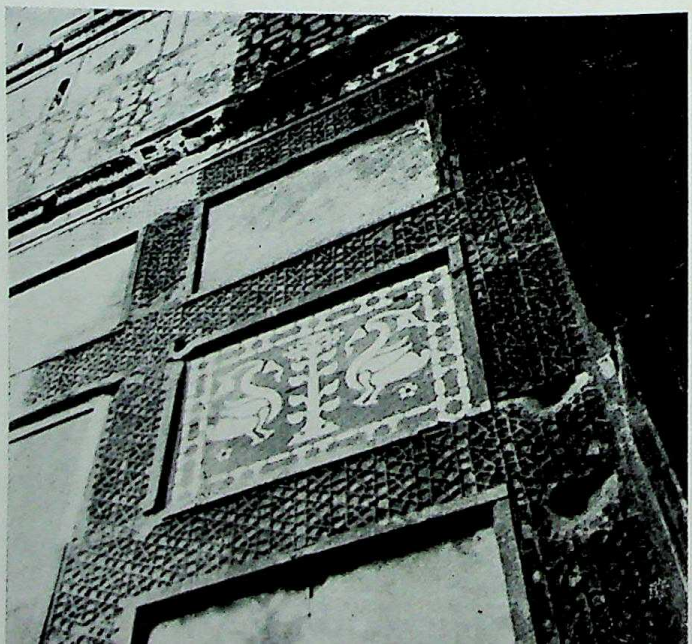
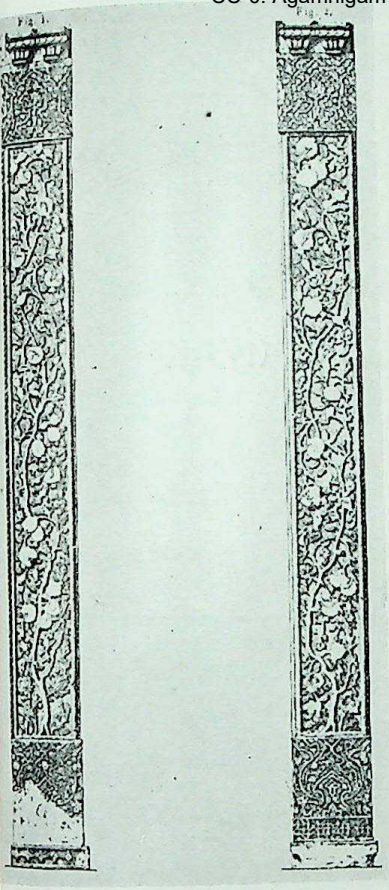


Plate CXXIX
Ducks, Delhi-gate, Agra Fort
(p. 127)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh



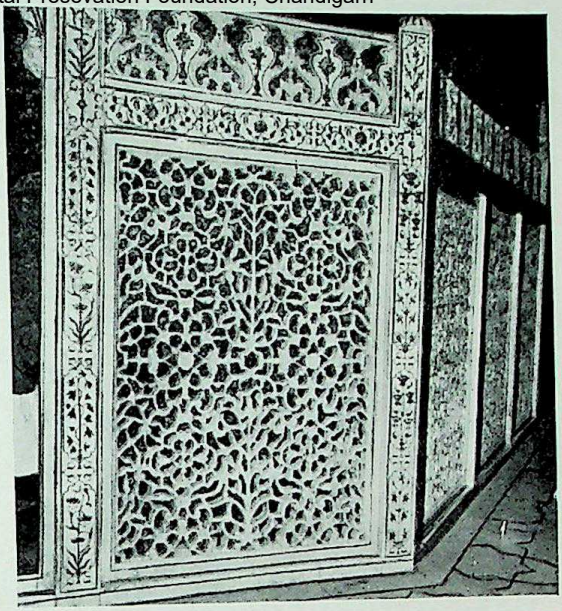


Plate CXXXI
Stylized creeper, The Taj Mahal (p. 133)

Plate CXXX
Creepers, Sultana's Palace, Fatehpur Sikri
(p. 133)

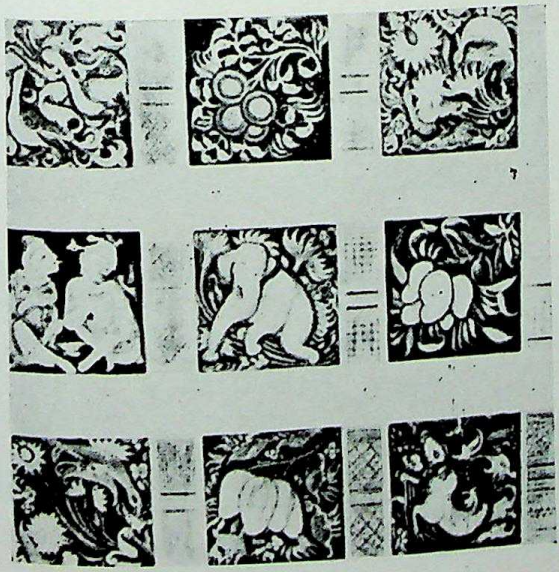


Plate CXXXII
Wave with bison-head, Ajanta
(p. 134)

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

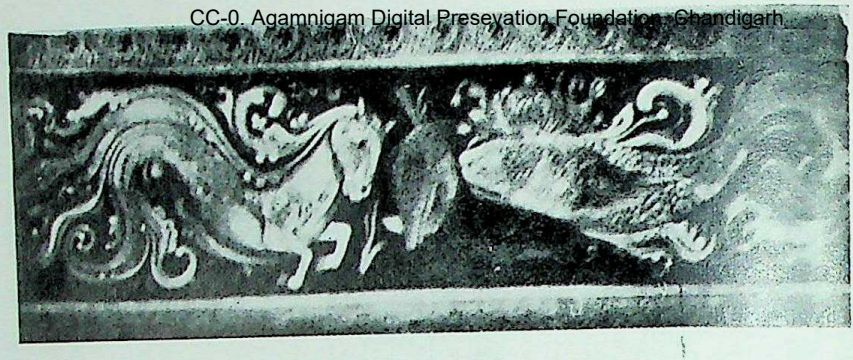
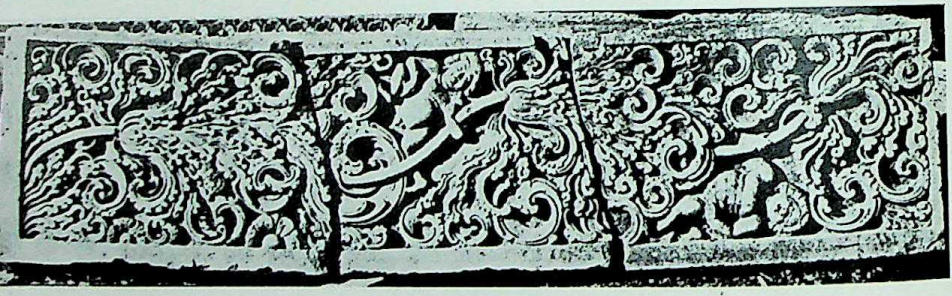
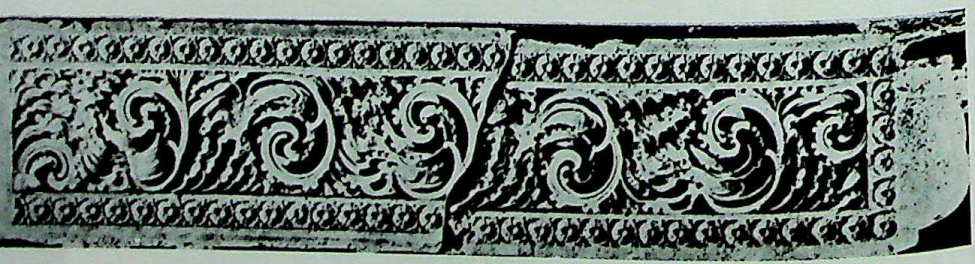


Plate CXXXIII (*a*) *Wave with horse, Ajanta* (p. 135)



(*b*) *Wave from Bhumara* (p. 135)



(*c*) *Wave from Bhumara* (p.135)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

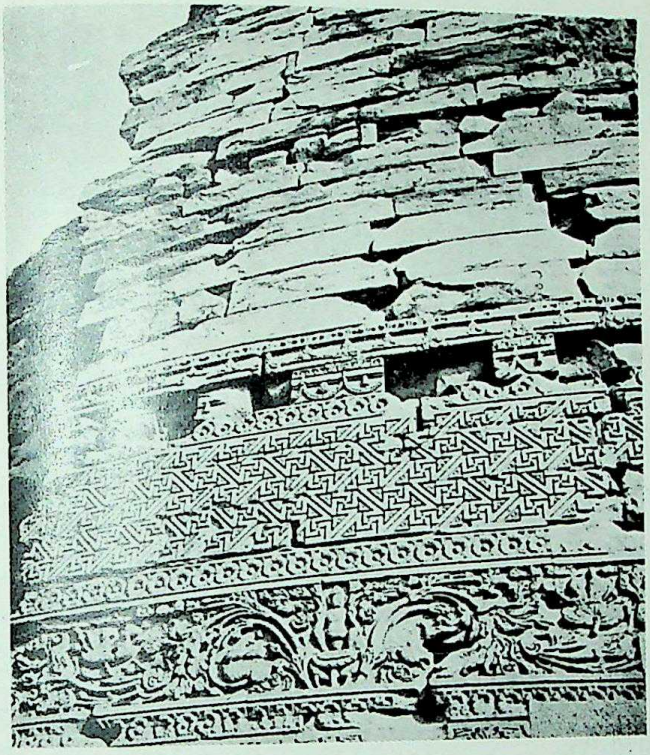


Plate CXXXIV
(*a*) *Wave pattern, Sarnath* (p. 135)

(*b*) *Wave pattern, Sarnath* (p. 135)

Plate CXXXV (*a*) *Wave with bison-head, from Sultangarhi* (p. 136)

CC-0. Agamnigam Digital Presevation Foundation, Chandigarh

Plate CXXXV (b)
Wave with lion-head, from Sultangarhi
(p. 136)

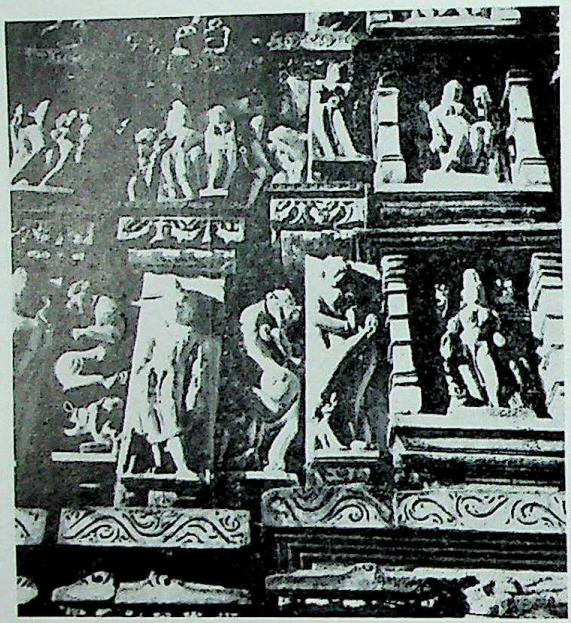


Plate CXXXVI
Wave, Khajuraho
(p. 136)

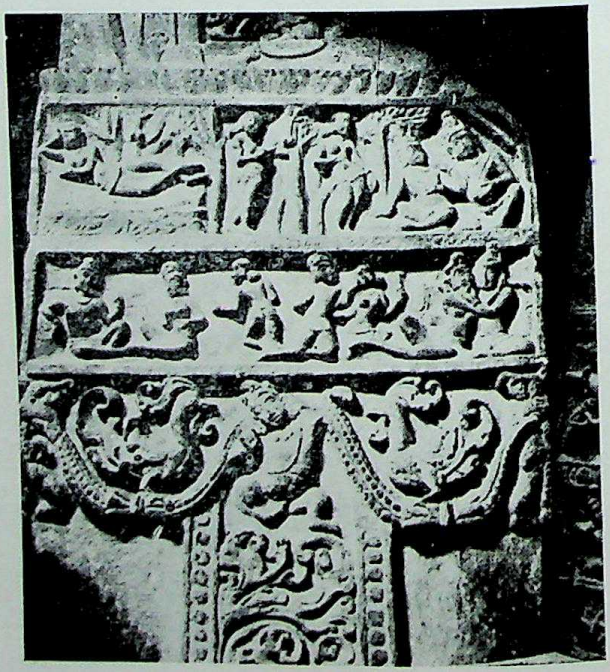


Plate CXXXVII
Wave from Pattadakal
(p. 136)

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

Plate CXXXVIII
Wave with makara, Halebid (p. 137)

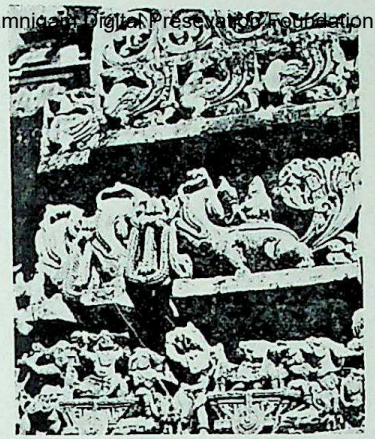


Plate CXXXIX
Wave lintel from Hampi (p. 137) ↓

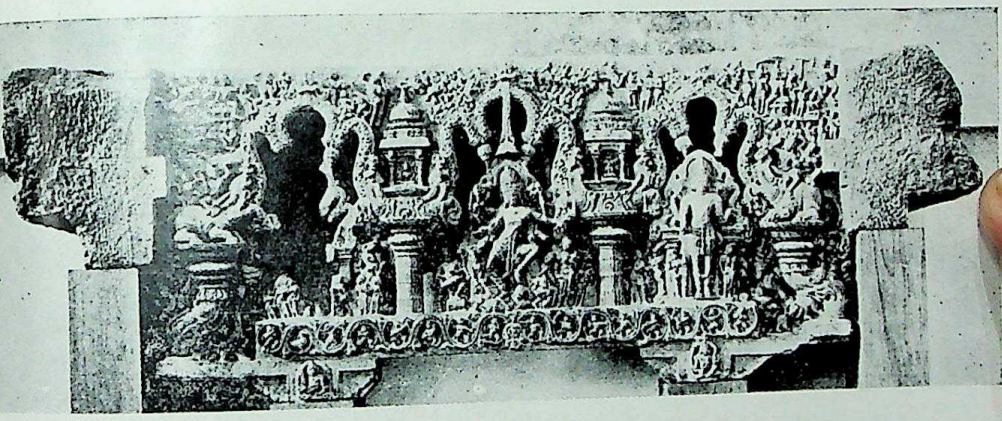


Plate CXL
Ahichhatra Terracotta Plaque showing Chinese dragon (p. 142) →

Plate CXLI
Wave design on ceiling, Tomb of Itimad-ud-Daulah (p.144) ↓

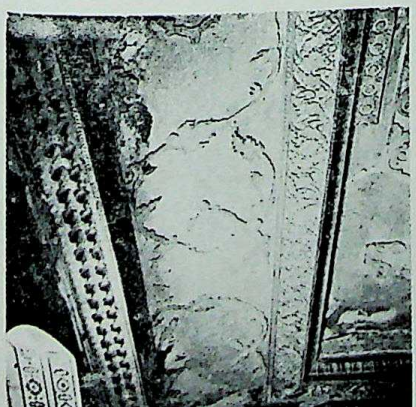


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Plate CXLII
Wave design, Chini-ka-Rauza (p. 144)

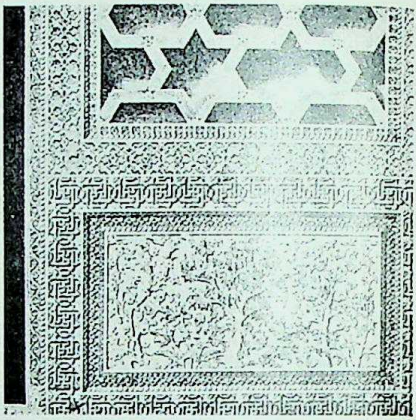
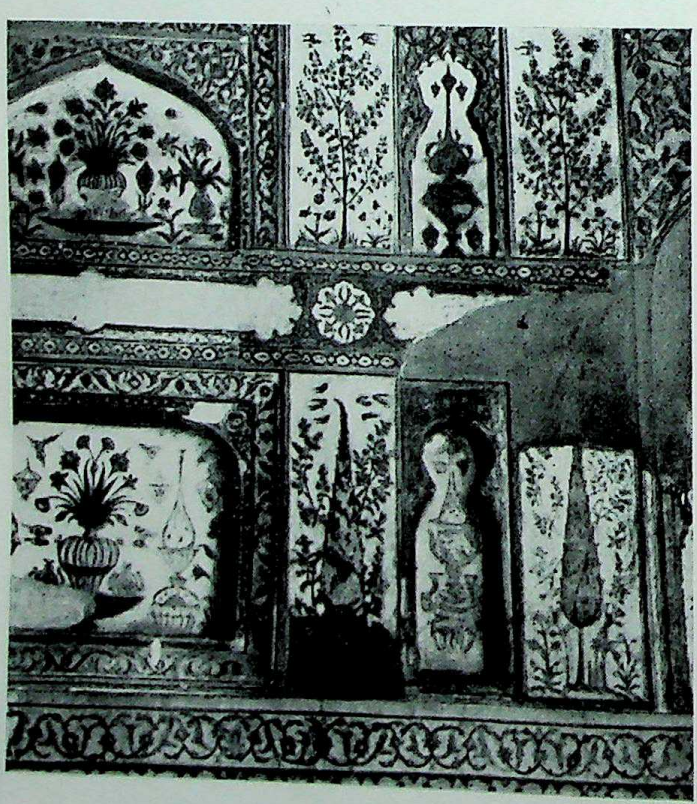


Plate CXLIII
Chinese cloud-forms on dado, Sultana's Palace, Fatehpur Sikri (p. 145)

Plate CXLIV *Chinese cloud-forms, Tomb of Itimad-ud-Daulah* (p. 145)



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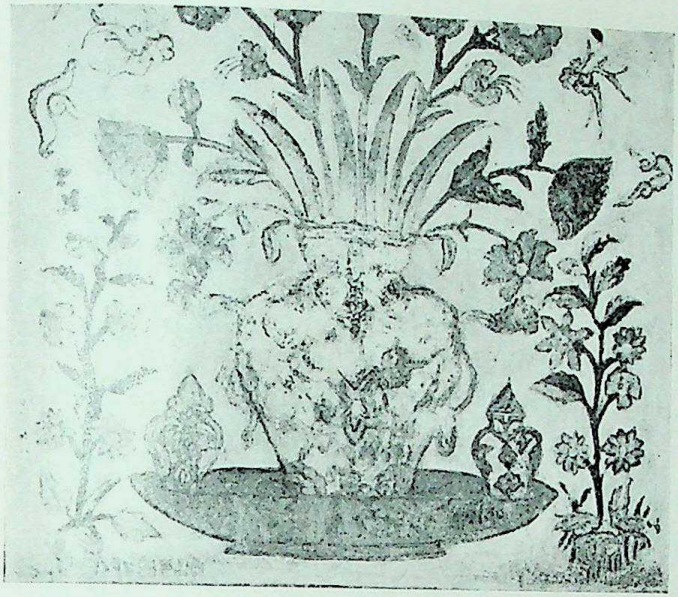
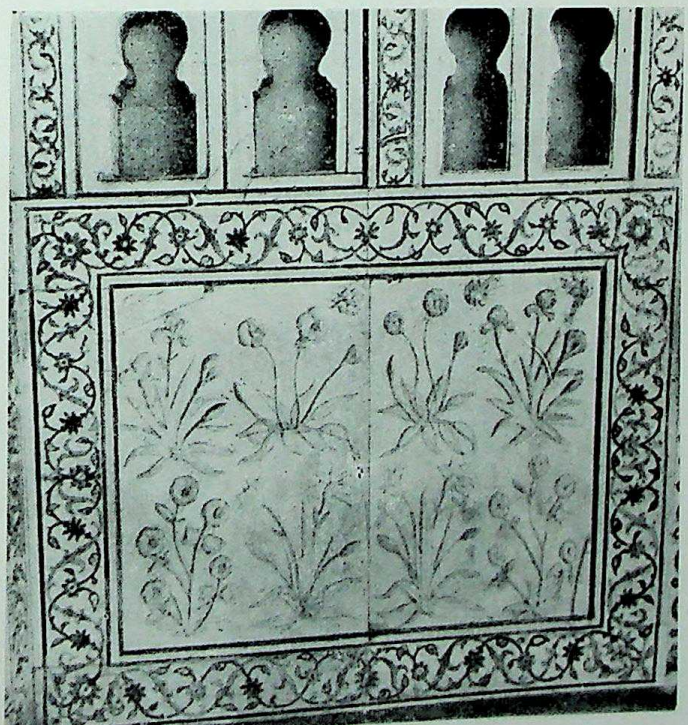


Plate CXLV
Chinese cloud-forms, Tomb of Itimad-ud-Daulah (p. 145)

Plate CXLVI
Chinese cloud-forms on dado, Musamman Burj, Agra Fort (p.145)



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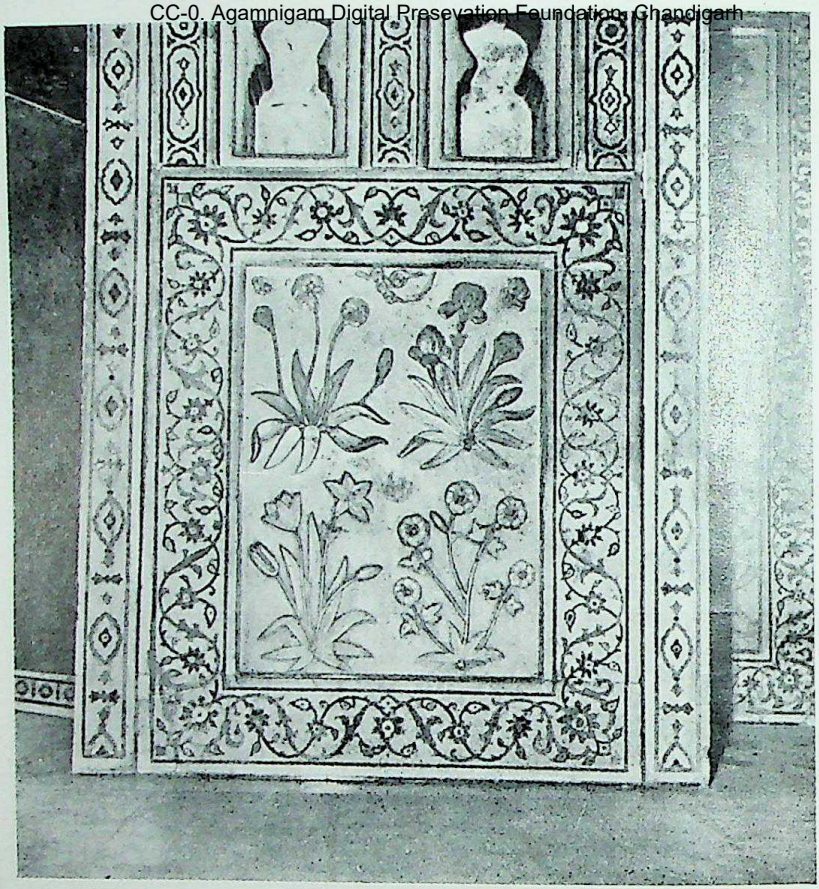

Plate CXLVII *Chinese cloud-forms on dado, Musamman Burj* (p. 145)

Plate CXLIX *Phoenix from Morgan Bestiary* (1294) (p. 147)

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Plate CXLVIII *Chinese cloud-forms in Tibetan Art* (p. 146)

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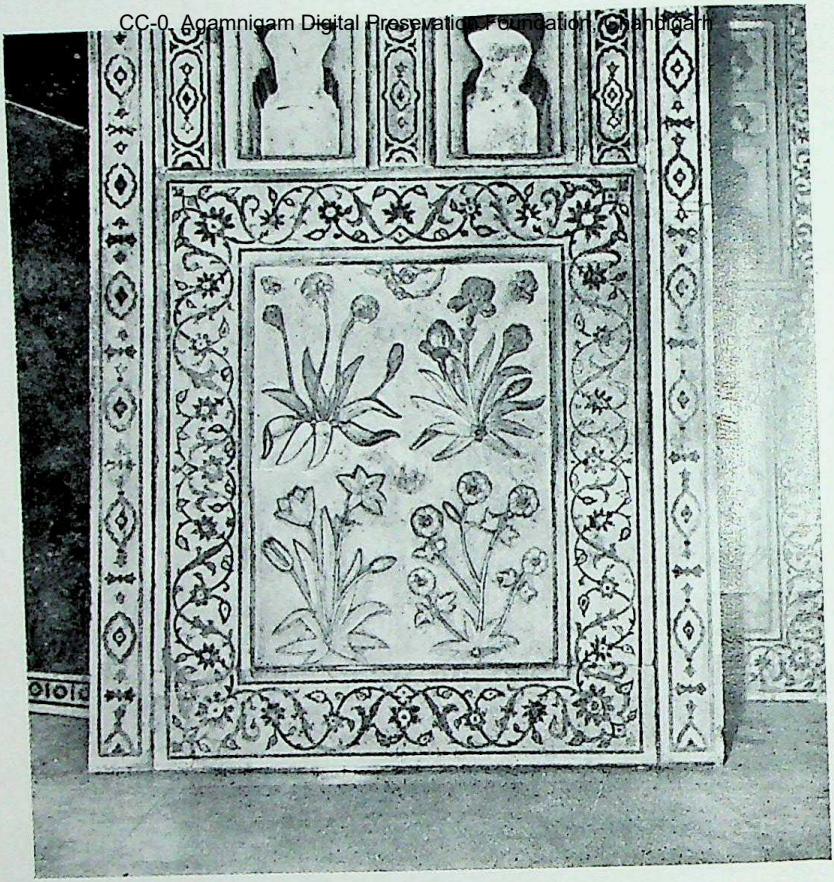

Plate CXLVII *Chinese cloud-forms on dado, Musamman Burj* (p. 145)

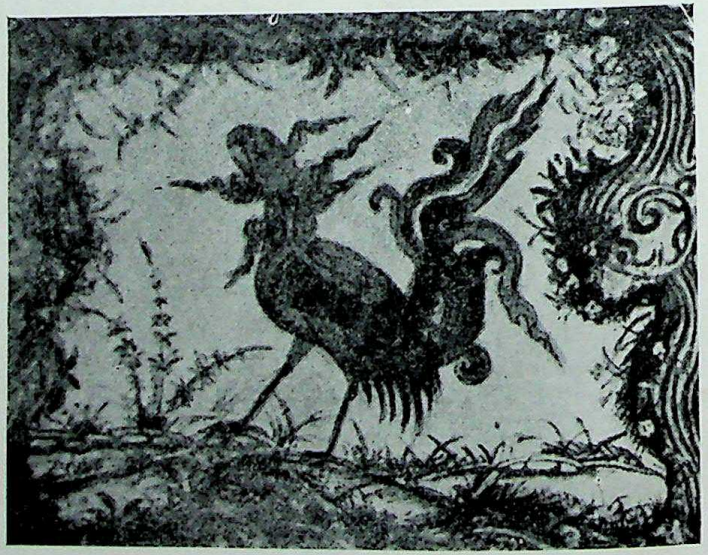

Plate CXLIX *Phoenix from Morgan Bestiary* (1294) (p. 147)

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Plate CXLVIII *Chinese cloud-forms in Tibetan Art* (p. 146)

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Plate CL *Shah-Nama Painting* (1440) (p. 149)

Plate CLI *'The Ascension of Muhan mad' from Miraj-Nama* (1436) (p. 149)

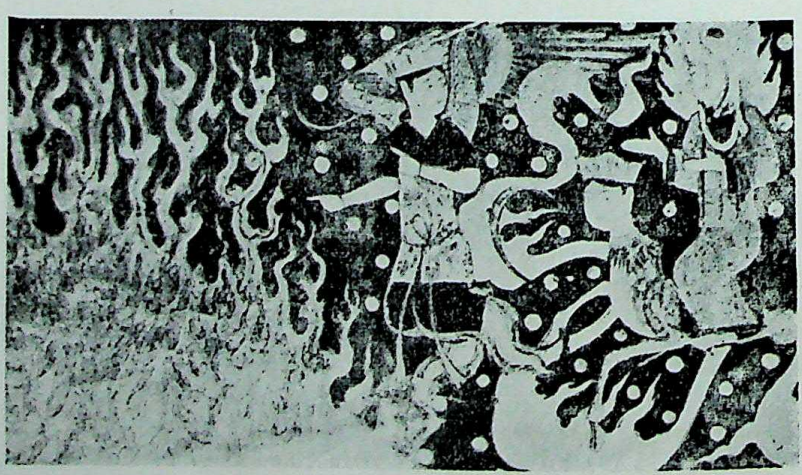

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Plate CLII
Miniature showing Tchi from Muraqqa-i-Gulshan (p. 150)

Plate CLIII
Miniature showing Tchi from Muraqqa-i-Gulshan (p. 150)

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Plate CLIV
Miniature showing Tché from Muraqqa-i-Gulshan (p. 150)

Plate CLV
Hashiyah, Mughal Miniature (p. 151)

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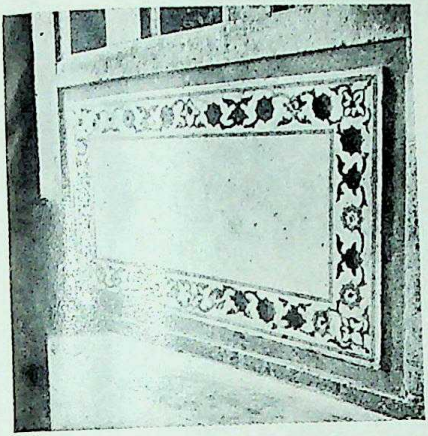


Plate CLVI
Hashiyah (inlaid border), on dado, Akbar's Tomb (p. 155)

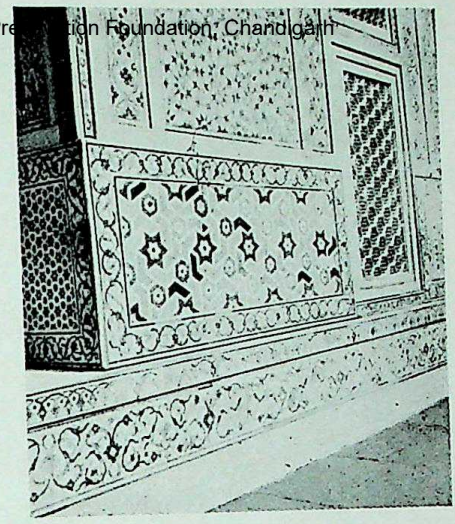
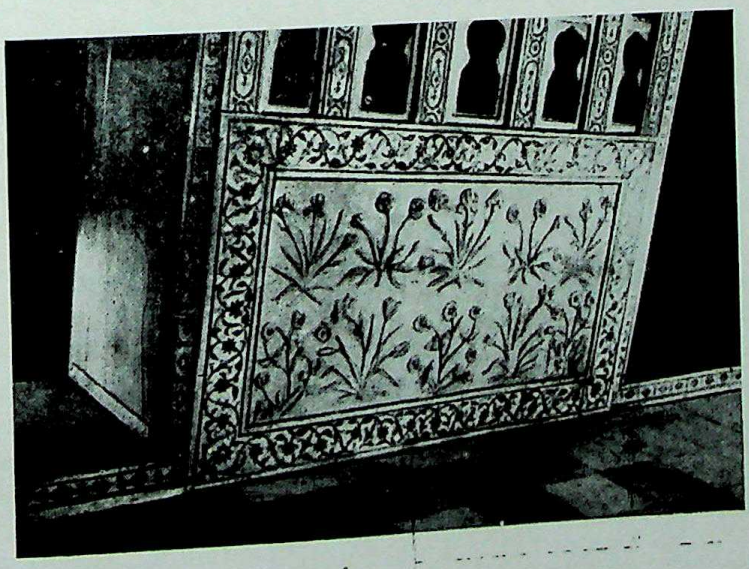


Plate CLVII
Inlaid border, Tomb of Itimad-ud-Daulah (p. 155)

Plate CLVIII *Inlaid border, dado, Musamman Burj, Agra Fort* (p. 155)



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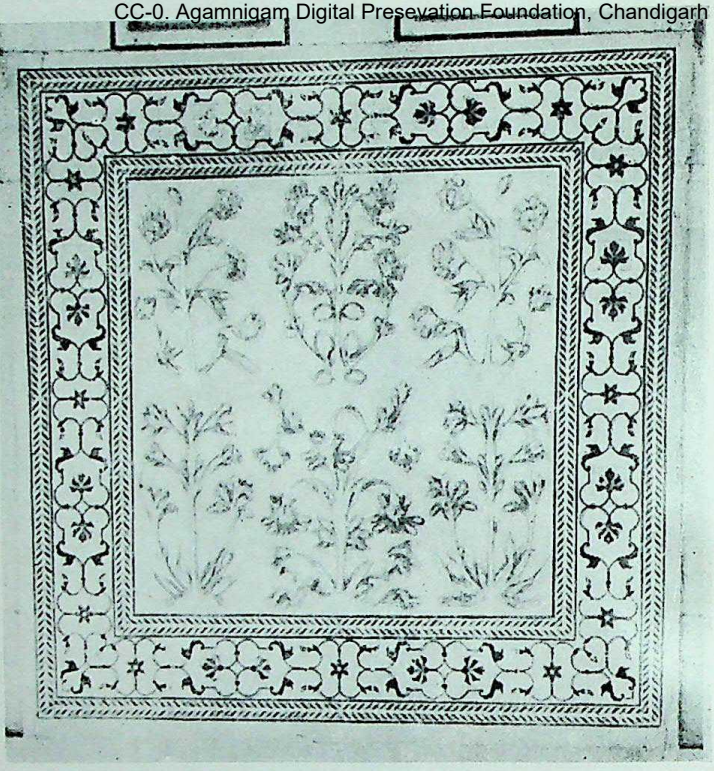

Plate CLIX *Inlaid border, dado, Diwan-i-Khas, Agra Fort*
(p. 156)

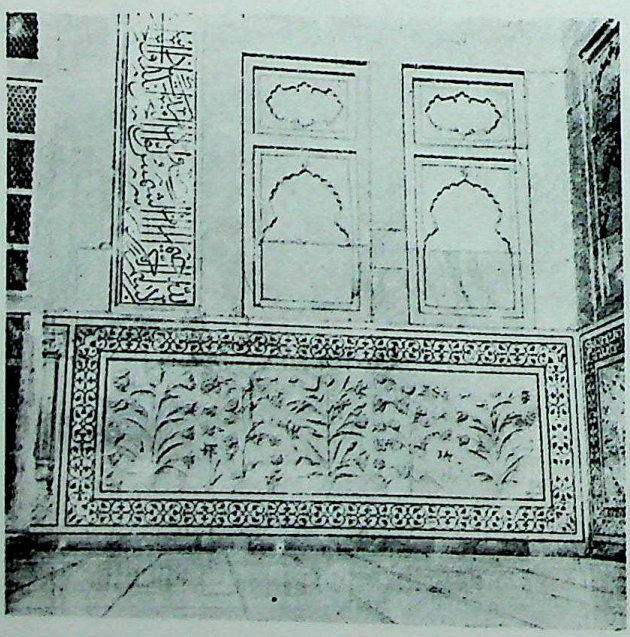

Plate CLX
Inlaid border, dado, Portal, The Taj Mahal
(p. 156)

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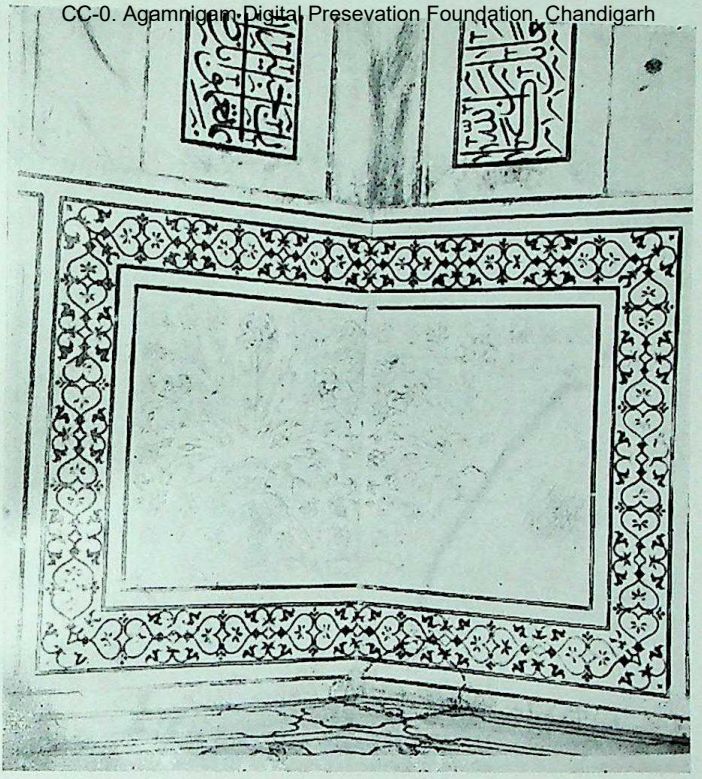

Plate CLXI *Inlaid border, dado, Mortuary-Hall, The Taj Mahal, Agra* (p. 156)

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